

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.





Direct from Grower to Planter-NO AGENTS

HIGHEST QUALITY

®  
1917  
**SEEDS**

BULBS PLANTS ROSES  
BIRDS POULTRY AND  
GARDEN SUPPLIES

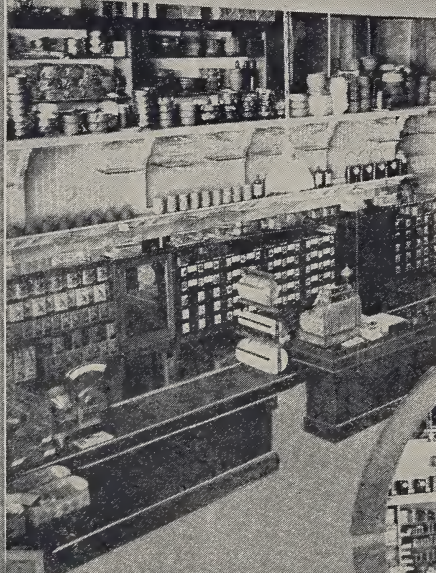


*ROUTLEDGE  
SUPERB  
Early  
Sweet Corn*

**Routledge**  
**SEED & FLORAL CO.**  
145, 147, 2nd St. PORTLAND, ORE.



In Our New Location, 145-147 Second St., bet. Morrison and Alder.



Since we issued our 1916 catalog we have moved into our new store on Second St. between Morrison and Alder. We now have a modern, light, airy building, with more room and better equipment. Our salesroom is much larger, more convenient and up-to-date in every respect.

We hope you will call and see us in our new location. See other views inside back cover.



# Order Sheet

# Routledge SEED & FLORAL CO

Rate

145 147 2<sup>nd</sup> St. PORTLAND ORE.

In filling this order we will use the greatest care to have it true to name, and will replace any that may prove untrue. But no sale by us carries a warranty of quality, express or implied, and for any error we shall not be liable for more than the purchase price. Every purchase from us is made on these terms.

ROUTLEDGE SEED & FLORAL CO.

ROUTLEDGE SEED & FLORAL CO.

NAME .....

DO NOT USE  
THESE SPACES

POST OFFICE ..... R. F. D. NO.....

No. \_\_\_\_\_

STATION (If different from P. O.)

Amt. \_\_\_\_\_

Re. \_\_\_\_\_

COUNTY \_\_\_\_\_ STATE \_\_\_\_\_

Ack. \_\_\_\_\_

DATE ..... AMOUNT ENCLOSED, \$.....

O. K. by.....

FORWARD BY .....

State if wanted by Mail, Express, Freight or Steamer.  
(Read Note on bottom of this page.)

Card Made \_\_\_\_\_

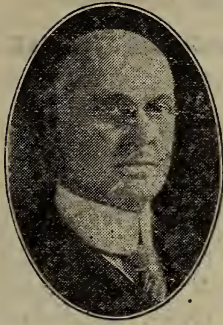
NOTE.—Before you send this order read carefully what we have to say about parcel post and transportation charges on pages 1 and 2.



## The Four Routledge Brothers



RALPH R.



J. IRA



C. H.—“DUKE”



GEORGE L.

Portland, Oregon, January 1, 1917.

Greetings to Our Customers and Friends.

At this writing we have just finished our 1917 annual catalog and it gives us much pleasure to present it to our many thousands of customers.

It, however, is not the largest and most elaborate catalog issued, but you will find it very complete in every department, and **perfectly reliable**. We list and offer only such stocks as are **especially adapted and profitable to western buyers**.

For twenty years our President and General Manager, surrounded by competent and reliable help, has devoted his entire time to this line of business.

Our stock is gathered together from all parts of the world. We go to the best source of supply, where “perfection” has been reached. Our business motto, “**Highest Quality first, price second, but as low as possible,**” is and will always be maintained. Our rapidly growing business proves that our efforts for **quality and service** is appreciated. The many words of praise given our seeds, plants and supplies are very gratifying.

**OUR NEW STORE.**—Since our last catalog was published we have moved into our new building, where we now have the only **real first-class, up-to-date** retail seed store in Portland. Our equipment and facilities for reliable and quick service is unequaled. We hope that our out-of-town customers will give us the pleasure of a call at the first opportunity. On the inside of the front and back covers we show a few views.

With the present high cost of living it will pay everyone, who has the room, to raise all the vegetables, fruit and poultry possible. Aside from the savings, profits and healthful exercise derived, the fact that you know your products are fresh and wholesome will be a great satisfaction.

We thank you sincerely for past orders and hope that we will have the pleasure of serving you again this year.

Yours for a greater development of the Pacific Northwest,

*Routledge*  
*Seed & Floral Co.*

OUR NEW SEED STORE, 145-147 Second St. Between Morrison and Alder

OUR CITY NURSERY DEPARTMENT, N. W. Corner 4th and Madison Sts.



## BEANS—Continued

### Dwarf or Bush—Green Podded Kinds

Packet and single pound prices only are prepaid. Add postage to 10 lb. prices if wanted by mail.

#### Stringless Green-Pod

The most popular and best liked green snap bean.

This famous bean is unequalled as a first-early!

It combines unusual hardness, extreme earliness, and wonderful productiveness with handsome appearance and finest quality of pods. Extra early plantings may be made to produce the earliest crop, and even with later plantings this bean is the quickest to produce pods.

By repeated plantings pods may be had in constant succession from spring until cut off by heavy frosts in the fall. Combined with the extra hardness and early maturity, the pods are the finest in quality, of a rich green, very round and almost straight, long, solidly meaty and plump,—deeply saddle-backed, caused by the rounded swell of the fleshy sides. The pods are tender, brittle, and of finest flavor, always entirely stringless ever when fully matured.

Large pkt. 10c; lb. 30c; 10 lbs. \$2.25



Stringless Green-Pod.

**DWARF HORTICULTURAL.**—One of the best dwarf sorts for green shell beans for the home garden and market and can be used early as a garden podded snap bean. The plants are very productive, compact and upright, with large leaves. The mature pods are about five to five and one-half inches in length, broad and thick, curved, with splashes of bright red on a yellowish ground. They become fit for use as green shelled beans early and in this condition the beans are very large, easily shelled and are about equal to the Lima in quality. Seed large, oval, plump, pale buff splashed with deep red.

Large pkt. 10c; lb. 25c; 10 lbs. \$2.00

### White Wonder—for "Snaps"

Many of our customers have asked for a green podded white bean that would answer for a "snap bean" as well as a white bean for winter use. White Wonder is the bean to plant for this purpose. The strong points in its favor are its exceptionally fine flavor, remarkable productiveness, extreme hardness and splendid appearance. It is a string bean, but there are few if any beans that cook more tender. Pods large, round and straight. Seed pure white, of medium size and excellent quality, baked or boiled.

Large pkt. 10c; lb. 25c; 10 lbs. \$2.00

**LONG YELLOW SIX WEEKS.**—A very productive, extra early variety with long, straight, thick pods.

Large pkt. 10c; lb. 20c; 10 lbs. \$1.75

Walla Walla, Wash., Route 4, Box 42.

April 17, 1916.

Gentlemen: I received the seeds and was very much pleased with them.

Yours truly,

ALBERTA CUTTING.

### Broad Windsor

An English variety; large, broad, flat beans of delicious flavor. Used as a shell bean. Large pkt. 10c; lb. 25c; 10 lbs. \$1.50

### CASTOR BEAN

Used for medicinal purposes and by some claimed to keep moles away. Ornamental foliage, 4 ft.

Large pkt. 10c; lb. 40c

### Lady Washington For Dry Beans

A great improvement over the old "Navy," being much earlier, a trifle larger, and a very heavy yielder, especially adapted to western conditions. The pods all ripen together and early enough to harvest before winter rains. Bean pure white. Growers report our stock very superior.

Large pkt. 10c; lb. 25c; 10 lbs. \$2.00  
write for quantity prices.

**RED MEXICAN.**—An excellent dry bean for winter use. Used extensively for baking and Spanish dishes. Oregon grown, acclimated seed.

Large pkt. 10c; lb. 25c; 10 lbs. \$2.00

Market and Truck Gardeners should write us for special prices and state quality and kinds wanted. We'll save you money and you will get "Highest Quality" Seeds.



## BEANS—Continued

Packet and Single Pound **ONLY** are postpaid. Add postage if wanted in 10-lb. lots by mail.

### Climbing or Pole Beans

#### Improved Kentucky Wonder (Asparagus)

A very popular variety; often sold as asparagus. By far the best green podded pole variety. Pods green, very long, round and perfectly stringless. **Enormously productive and early, remaining in "fit" condition a long time.** Unsurpassed for the table, being very tender and of delicious flavor.

Large pkt. 10c; lb. 25c; 10 lbs. \$2.00

#### Kentucky Wonder Wax

This grand new pole bean is a wax podded Kentucky Wonder and many think it is of better flavor. We believe it is a more vigorous grower and will yield fully as heavy as the Kentucky Wonder. The pods are a light yellow, extra large, broad and long and cook very tender. We recommend this bean strongly. Comparatively early.

Large pkt. 15c; lb. 35c

#### Worcester Pole

The finest Pole Shell Bean in cultivation and on account of its wonderful productiveness and superior quality takes first rank as a Pole Shell Bean. The strain we offer is an especially fine one. The long, thick pods are brilliantly colored with crimson carmine and are borne in clusters. Unequaled for tenderness and delicious flavor.

Large pkt. 10c; lb. 25c; 10 lbs. \$2.00

#### Routledge Giant

Although the pods are often a foot long and an inch thick, the flavor and quality when cooked is rich and excellent. It is an enormous yielder, fine for canning. Pods and seed light yellow, striped and mottled crimson.

Large pkt. 15c; lb. 40c

**EARLY GOLDEN CLUSTER WAX.**—A very popular early and fine variety; pods golden yellow, long, wide and flat, borne in clusters, of fine quality and remain in condition to use for a long time; seed flat and dull white.

Large pkt. 10c; lb. 25c; 10 lbs. \$2.25

**LAZY WIFE.**—Produces heavy crops of broad, flat, fleshy, tender, stringless green pods. Fine snap beans or shelled for winter use; rich, buttery flavor.

Large pkt. 10c; lb. 30c; (very short crop)

**SCARLET RUNNER.**—Grown extensively for ornamental purposes, as flowers are a most brilliant scarlet and borne profusely; beans are broad and flat, and of fine flavor when cooked, same as Lima beans.

Large pkt. 10c; lb. 35c

### Pole Lima Beans

#### Early Leviathan

One of the newer varieties and the very best pole variety in cultivation; pods long and borne in clusters; beans large and white; is early, strong-growing and prolific.

Large pkt. 10c; lb. 25c; 10 lbs. \$2.00

#### Oregon Pole Lima

Those who are fond of a good lima or butter bean will find nothing better than this for our Northwest climate. The large, plump, white beans are excellent shelled green or used as dry beans. We recommend this bean, as it is early, hardy and prolific. This bean is fully acclimated, as we have grown it for years.

Large pkt. 15c; lb. 40c; 10 lbs. \$3.00

**KING OF THE GARDEN LIMA.**—The largest podded variety and very productive vines; very vigorous, often producing pods six to seven inches long. Beans large and of fine flavor, climbing. Large pkt. 10c; lb. 25c; 10 lbs. \$2.00

#### DWARF OR BUSH LIMA

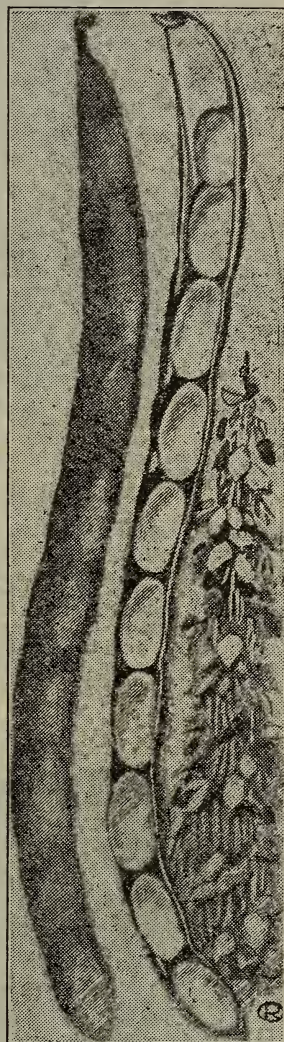
**HENDERSON'S BUSH LIMA.**—Fully two weeks earlier than any other variety. Plant grows about 16 inches high, and very prolific; beans are small; especially recommended where the season is short.

Large pkt. 10c; lb. 25c; 10 lbs. \$2.00

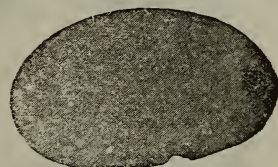
**BURPEE'S BUSH LIMA.**—The best late dwarf variety; plants grow 18 to 24 inches high; very prolific; pods large, and the beans also large and heavily ribbed; will bear until stopped by frost.

Large pkt. 10c; lb. 25c; 10 lbs. \$2.00

Although pole beans require a little more care and labor, they are, when properly grown, usually of longer bearing period than the dwarf sorts and are much more productive.



Kentucky Wonder.  
Asparagus.



Lima Bean.



See page 35.



## BROCCOLI

Forms a head like cauliflower, but is much hardier and gives excellent results. For fall use sow in April and May, for winter and spring cutting, June and July.

Very extensively planted by our local market gardeners for use in the late fall, winter and spring when cauliflower is out of season. Besides the **White French**, our old popular variety, we have procured from England three later varieties of real merit and great value.

**WHITE FRENCH.**—A valuable fall variety, large white heads of good quality.

Pkt. 5c; 1 oz. 50c; 4 oz. \$1.50

protected, large, handsome and greatly appreciated at table.

Pkt. 10c; 1/4 oz. 40c; 1 oz. \$1.25

### St. Valentine—King of All

An excellent variety, heads large, solid and white; remains in good condition a long time. We import our seed direct from the originator. This strain has given excellent satisfaction to our large growers. Ready to cut in February. Our imported seed from the originator is of the highest quality.

Pkt. 10c; 1/4 oz. 40c; 1 oz. \$1.25

### Sutton's Winter Mammoth

Immense white heads, superb in texture and quality, coming into use in midwinter, when the late autumn cauliflowers and broccoli are over. Vigorous in habit and self-protecting.

Pkt. 10c; 1/4 oz. 25c; 1 oz. 75c

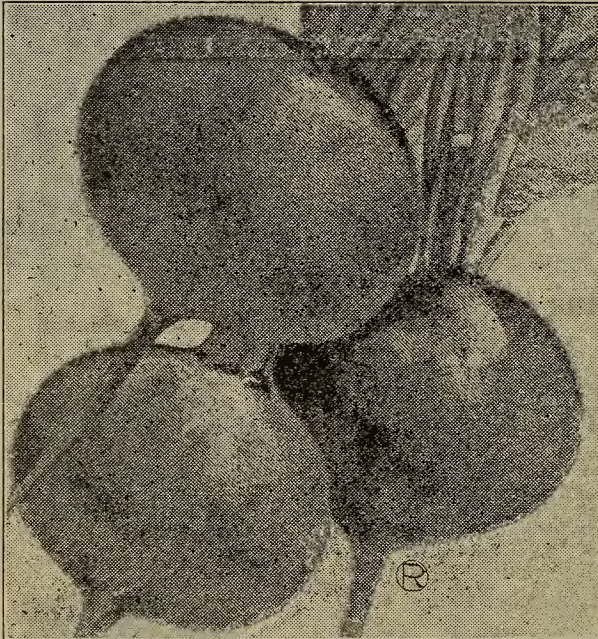
### Sutton's Late Queen

Quite distinct from all other broccoli, dwarf and compact in growth, rarely affected by frost, and when planted late produces splendid heads the following spring in May or June. Sutton's Late Queen has successfully passed through most severe winters. The heads are well



St. Valentine.

## TABLE BEETS



Routledge Favorite.

### Routledge Favorite

A select strain, very early. Perfectly globe shaped, with a single tap root, and of the richest color of any of the beets. It is a splendid keeper, is not excelled in yielding qualities by any other sort, is exceedingly tender, fine and sweet and is unequalled for table use. Market gardeners will find our Favorite a very profitable variety to grow, as no other sort approaches it in attractiveness or quality.

Pkt. 10c; oz. 15c; 4 oz. 40c; 1b. \$1.25

### Crosby's Egyptian

Very popular early beet, as it reaches the desired size quickly. The beets are of good size, rather flat than round, and flesh dark.

Pkt. 5c; oz. 15c; 4 oz. 40c; 1b. \$1.25

### Detroit Dark Red

Excellent variety, nearly globular, dark skin and dark flesh, zoned lighter; maturing early and keeping crisp and tender for a long time.

Pkt. 5c; oz. 15c; 4 oz. 40c; 1b. \$1.25

### Improved Early Blood Turnip

This is the ideal beet for market gardeners. It is very symmetrical, with small tap root and but few fibrous roots; color outside is deep blood red; fine grained and unsurpassed in quality. It continues to grow until late in the fall, attaining a large size and making a good selling and eating beet for winter.

Pkt. 5c; oz. 10c; 4 oz. 35c; 1b. \$1.10

## OUR MOTTO is

"Highest Quality"

It's quality **FIRST**, then price as low as possible. The best seeds are the cheapest in the end, even though they cost a little more.

**HALL'S GARDEN CULTIVATORS** are priced very low and will save you much work in the garden. See page 120.



**TABLE BEETS—Continued**

**EDMAND'S BLOOD TURNIP.**—Unsurpassed for late planting; deep blood-red flesh, very tender and juicy, runs very evenly in size and quite round; grows a small top.

Pkt. 5c; oz. 10c; 4-oz. 30c; lb. \$1.00

**HALF LONG BLOOD.**—Becoming more and more popular. Excellent in shape and quality; yields well.

Pkt. 5c; oz. 10c; 4-oz. 30c; lb. \$1.00

**LONG BLOOD.**—The root is smooth and handsome, flesh brilliant in color and excellent quality. Good keeper.

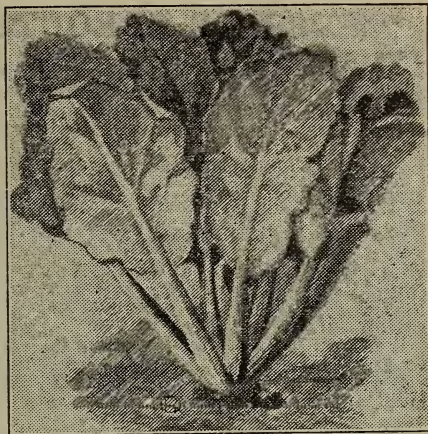
Pkt. 5c; oz. 10c; 4-oz. 30c; lb. \$1.00

**Swiss Chard**

"Spinach Beet" or Sea Kale.

This does not make edible roots like the regular garden beets, but is grown for the broad white leaf-stalks, which are bunched and cooked in the same manner as asparagus. The young leaves may be gathered also and cooked like spinach. Makes a delicious summer vegetable.

Pkt. 5c; oz. 15c; 4 oz. 45c; lb. \$1.35



Swiss Chard.

**Stock Beets or Mangels**

Price of all the following varieties: Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 60c; 10 lbs. and upward, not prepaid, 45c lb.

**GIANT YELLOW ECKENDORF**

A new mangel of great merit. The roots are smooth, long and cylindrical in shape, very heavy, weighing up to 15 and 20 pounds each; grow two-thirds above ground. The flesh is firm, crisp and solid, white in color and of high feeding value. (See cut.)

**Giant Half Sugar Mangel**

Yields as much per acre as the best Mangels, and twice as much per acre (bulk of roots) as the rich sugar beet. Roots grow very large above the ground. Smooth, creamy white in color and very nutritious. Easily pulled. (See illustration No. 1.)

**MAMMOTH LONG RED**

Very popular and much used. A large and heavy cropper. Dark red skin, with whitish flesh; grows one-half or more above the ground; roots quite regular; attain a very large size. (Same shape as No. 2.)

**DANISH SLUDSTRUP**

An improved variety, considered one of the best. Awarded first class certificate. Color, reddish yellow, and of a distinct type. It is very hardy, grows well above ground; is easily pulled and very nutritious. (See cut.)

**GOLDEN TANKARD**

An enormous yielder of weight per acre, and at the same time very nutritious; flesh deep yellow, of fine shape, growing largely above ground, thus being easily harvested. (Same shape as cut No. 3.)

**Sugar Beets**

**FRENCH WHITE SUGAR.**—The sugar beet most generally grown for stock, as it combines, with heavy yield, from 10 to 13 per cent of sugar.

**KLEIN WANZLEBEN.**—The most popular for table and for sugar production.

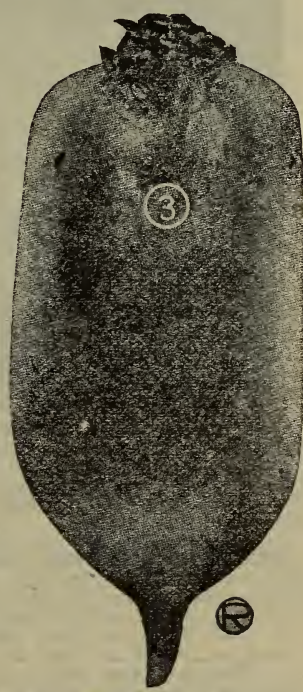
Pkt. 5c; oz. 10c; 4 oz. 20c; lb. 65c



(1) Giant Half Sugar.



(2) Danish Sludstrup.



(3) Giant Yellow Eckendorf.



## BRUSSELS SPROUTS

**PERFECTION OR DALKEITH.**—Plants are of dwarf growth and stems are thickly set with large, solid sprouts. This variety is very hardy and even during quite severe weather, the plants maintain their sprouts; in fact, the flavor and quality is much improved by frost. Pkt. 5c; oz. 30c; 4 oz. 85c

**CHIVES.**—See Vegetable Roots, page 34.

## CHICORY

Chicory is grown quite largely for the large thick roots, which are sliced, dried, roasted, and ground as a substitute or adulteration for coffee. The leaves are also used as a salad during the early spring months. To secure large smooth roots the soil should be light, rich, and deeply worked, and the plants should be thinned out to stand four to six inches apart.

**LARGE-ROOTED OR COFFEE.**—Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.25.

## CHERVIL

**CURLED.**—An aromatic herb, resembling parsley, and used for flavoring in soups and salads. Fine for garnishing.

Pkt. 5c; oz. 15c; 4 oz. 40c

## CRESS

**CURLED OR PEPPER GRASS.**—Used as a salad and fine for garnishing.

Pkt. 5c; oz. 10c; 4 oz. 25c

**TRUE WATER.**—This is quite distinct from the former and only thrives when its roots and stems are submerged in water. It is one of the most delicious of small salads.

Pkt. 10c; oz. 35c; 4 oz. \$1.25



Brussels Sprouts.

## COLLARDS

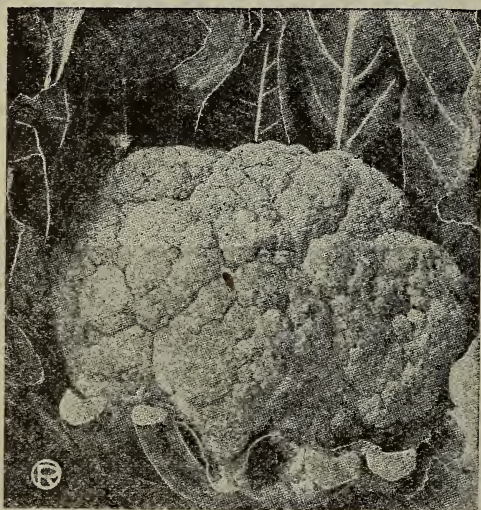
**TRUE GEORGIA.**—Used as "greens" mainly in the South and West. As the leaves are pulled off, others grow in their places.

Pkt. 5c; oz. 15c; 4 oz. 30c

"Highest Quality"

## CAULIFLOWER

Plants Page 34



Routledge Snow White.

**EXTRA EARLY SNOWBALL** (Extra Selected).—This is the choicest selected strain of the popular Erfurt type, and is remarkable for its extreme earliness and reliability in heading. Medium size heads. Plants quite dwarf.

Pkt. 10c; ¼ oz. 50c; oz. \$1.50

**VEITCH'S AUTUMN GIANT.**—A large, late variety, very hardy. The heads are well protected by the foliage, enabling it to resist unfavorable climatic conditions.

Pkt. 5c; ¼ oz. 25c; oz. 75c; 4 oz. \$2.50

## ROUTLEDGE'S "SNOW WHITE"

The Finest Cauliflower Grown.

In competition with all other strains, this cauliflower has won the approval of critical gardeners, being early and also the **best main crop** sort grown. It is suitable not only for early use, but is superior for late planting. The heads are compact, firm and solid, and do not spread as do some of the inferior sorts. No other equals it in purity of color, being **clear snow white**. It is equally desirable for family use and for the market garden. The heads are large—from 9 to 12 inches in diameter. Very resisting against unfavorable seasons and dry weather, the foliage giving a splendid protection.

Pkt. 20c; ¼-oz. 75c; ½-oz. \$1.35; oz. \$2.50

## EARLY SNOWBALL

This variety is much in demand by market gardeners. Its earliness, compact habit, large-sized heads and snow-white color recommend it to every grower as a variety of especial merit. We have an extra selected stock of this sort, and recommend it with the greatest confidence.

Pkt. 15c; ¼ oz. 65c; ½ oz. \$1.20; oz. \$2.00

**NEW CALIFORNIA WONDER.**—A late variety, forming good, large, solid heads during the winter. This variety has given great satisfaction in Oregon and California, wherever tried. Pkt. 10c; ¼-oz. 50c; oz. \$1.00; ¼-lb. \$3.00

**ALGIERS.**—A very strong growing late variety, with large leaves of a bluish cast. In cool locations and rich soil it produces very large, solid, white heads late in the fall.

Pkt. 10c; ½-oz. 40c; oz. 75c; 4-oz. \$2.25

**BUG DEATH** kills all leaf-eating insects; excellent for using on cabbage, cauliflower, etc. Can be used either dry or in water. See description, page 117; also dusters and blowers, page 115.



**"Highest Quality"****CABBAGE****True and Pure**

Our Cabbage Seeds come from the world's best growers—pure, true strains, of highest quality. One ounce will produce over 3000 plants. One-quarter pound of seed will produce plants sufficient for one acre, therefore, don't practice false economy by buying low-priced, low-quality seed.

**Early Jersey Wakefield**

The earliest and hardest heading of first early cabbages. Most gardeners depend upon it for the bulk of their extra early crop. Its exceeding hardiness not only to resist cold but other unfavorable conditions, insures the greatest likelihood of profitable and satisfactory results. Our stock is grown and selected with the greatest care; there is none better, and few as good. Head conical, very compact, solid and of excellent quality. The thick, stout leaves and compact habit makes it the best sort for very early setting. **HIGHEST QUALITY SEED.**

Pkt. 5c; oz. 30c; 4 oz. 90c; lb. \$2.75

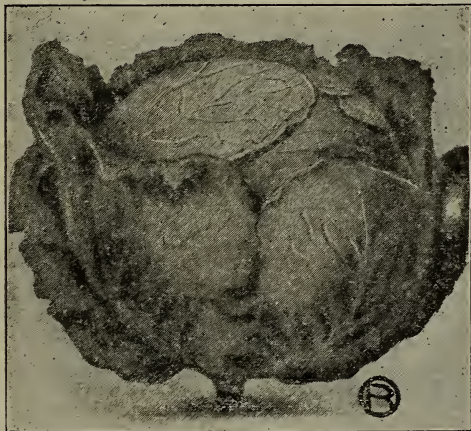
**R. S. & F. CO.'S****OREGON WAKEFIELD**

A new, most remarkable and valuable strain of Wakefield. It has the same general characteristics of other Wakefield cabbages, the heads being conical with a rounded or blunt point. It is, however, far superior to other strains, being nearly double the size and of better quality, and at the same time is almost as early. It has few outer leaves, permitting close planting.

Pkt. 10c; oz. 30c; 4 oz. 90c; lb. \$2.75

**EARLY YORK.**—A small, early, conical heading cabbage. Has been very popular. Plant close.

Pkt. 5c; oz. 25c; 4 oz. 75c; lb. \$2.25

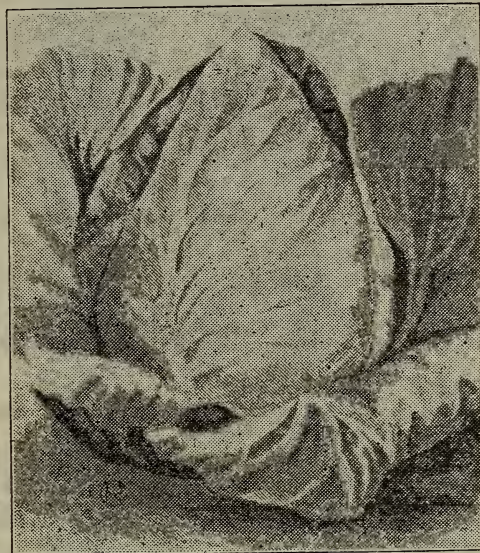


Danish Round Head.

**"Carco" Vegetable Spray**

New discovery; harmless to plant life, but kills cabbage maggots, radish and turnip worms, etc. Read about "Carco," page 117, or send for descriptive pamphlet. "Carco" is the most valuable non-poisonous insecticide discovered in recent years.

**CABBAGE PLANTS.**—During planting season we aim to have on hand large quantities of Cabbage and Vegetable Plants. (See page 34.)



Early Jersey Wakefield.

St. Johns, Ore., Sept. 2, 1916.

Gentlemen: Your "Stringless Green Pod Beans" are the best I ever ate, lovely flavor and very tender. Can be used as Snap Beans even when large enough to shell, and pods stringless and tender. Also your "Davis Kidney Wax" are very prolific and average 6 to 9 inches in length. I canned 18 quarts and they are very nice.

Yours very truly,

MRS. GRACE ROSS.

**EARLY SPRING.**—It is the first early round-head cabbage, maturing about the same time as Jersey Wakefield. One of its chief claims to superiority is the remarkable uniformity of the heads. They are also very solid, even when young, and with very small outside leaves.

Pkt. 5c; oz. 20c; 4 oz. 50c; lb. \$1.50

**Early Winnigstadt**

One of the best for general use, being very hardy, sweet, fine quality, and sure to head. Head regular, conical, very hard and keeps well both summer and winter. It is the hardest, not only as regards frost, but will suffer less from excessive wet, drought, insects or disease than any other second early sort.

Pkt. 5c; oz. 25c; 4 oz. 75c; lb. \$2.25

**Copenhagen Market—New**

The earliest large round-headed cabbage yet introduced. Sure to head and every head perfect. The plant is of vigorous habit but compact, with short stem and few outer leaves which are of rather upright growth. The leaves are medium light green, nearly round, comparatively thick and smooth. The heads are round, very solid and of exceptionally good quality. Its earliness, compact growth, uniformity and size of head, firmness and most excellent quality combine to make Copenhagen Market the most valuable cabbage of recent introduction. We recommend it unreservedly. Worth the additional price.

Pkt. 10c; 1/2 oz. 20c; oz. 35c; 4 oz. \$1.00



## CABBAGE—Continued—Late Varieties

### Wong Bok      Pe-Tsai

#### Or Chinese Cabbage

Chinese or Celery Cabbage has attained great popularity in the last two years.

We offer the true Pe-Tsai or Chinese Cabbage, which has been known and cultivated in China for many years. While practically unknown in many markets, the Chinese gardeners of the Pacific Coast have successfully cultivated it for years.

Pe Tsai produces beautiful, crisp, celery-like heads that blanch easily and that resemble a giant Cos Lettuce. As a salad it rivals the finest lettuce, while cooked like cabbage or spinach it makes a delightful "greens."

Pe-Tsai will not stand heavy frosts, so that heads intended for winter use should be dug and stored in a cool cellar.

Plant seed from June to August thinly in drills or grow like late cabbage and transplant to 1 foot apart in rows. When grown it can be blanched like celery by tying or wrapping up. **Pkt. 10c; oz. 50c**



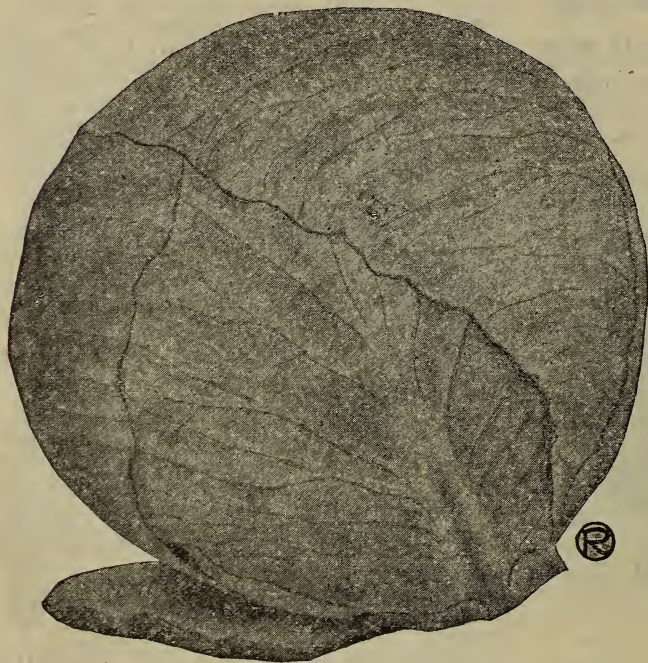
Wong Bok      Pe-Tsai.

### Danish Round Head

An earlier short-stemmed strain of the famous Danish Ball Head.

Large and very solid, round head on short stems, having the same keeping quality as the original strain of Danish Ball Head, so widely known. It is 10 days to 2 weeks earlier and produces larger yields. It is especially valuable for high, dry land, producing good sized heads where other strains would be too small. For shipping in the late fall or winter there is no finer cabbage. Our seed of Danish Round Head comes direct from the originator in Denmark and is of the **Highest Quality**. See cut. page 11.

**Pkt. 10c; oz. 30c; 4 oz. 90c; lb. \$3.00**



Danish Ball Head or Hollander.

### Predium

#### Late Flat Dutch

A low growing variety; heads large, bluish green; round, solid, broad and flat on top; an excellent fall and winter variety, and a good keeper. It is a sure header. Our stock has been grown from carefully selected heads, and we consider it superior to any other strain of Flat Dutch cabbage on the market.

**Pkt. 5c; oz. 25c; 4 oz. 75c; lb. \$2.50**

### PERFECTION

**DRUMHEAD SAVOY.**—A variety that is much prized by those who are familiar with it. It is very sweet and crisp, and always tender. Heads medium size and compact, with densely and uniformly crimped or savoy leaves.

**Pkt. 5c; oz. 30c; 4 oz. 90c; lb. \$3.00**

**MAMMOTH ROCK BED.**—Best hard-headed, red variety; large heads, globular, and very deep red on top. **Very tender and excellent quality;** fine for cold salads on account of its attractive color.

**Pkt. 5c; oz. 35c; 4 oz. \$1.00**

### Danish Ball Head—Genuine Danish Grown Stock

Most remarkable late cabbage yet produced, heads hard and solid—fine grained and tender. Entirely distinct. Exceedingly hardy in resisting cold and wet weather. We offer true, pure seed of the very finest medium short stemmed type. Famous for its hard-heading qualities, which at once recommends it as highly valuable for shipping. The magnificent heads are round in form and keep in excellent condition during winter, coming out in the spring perfectly solid.

**Pkt. 5c; oz. 25c; 4-oz. 75c; lb. \$2.75**

**DO YOU SEND EAST for your Seeds? It's bad policy. Spend your money on this Coast. Here's where you sell your products. Our Seeds are highest quality.**



## CARROT

### Routledge Model—Coreless

The finest early table variety grown. Handsome, meltingly tender and sweet.

This new carrot is our own strain, grown from the French carrot, Nantes. You will be delighted with the melting tenderness and sweet, mild flavor of Routledge Model.

It is a half-long cylindrical carrot, blunt pointed, with a small tap root and small top. They run very uniform in shape and grow just the right size for table use. The flesh is of fine texture, entirely devoid of stringyness, coarseness and woody heart; color orange scarlet, very attractive when served.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50

### FRENCH FORCING

Extremely early, sweet and mild, very popular. Roots small, globe-shaped, reddish orange, fine for early table.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.25

### EARLY SCARLET HORN

May be planted very early in spring, and is an excellent summer variety. Tops small and roots grow about 3 inches long; reddish-orange and good flavor.

Pkt. 5c; oz. 20c; 4 oz. 50c; lb. \$1.50

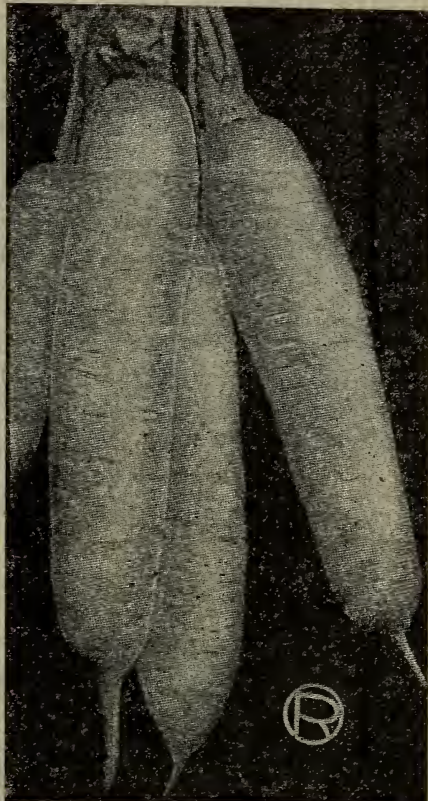
### Chantenay

The Market Gardener's Favorite.—Tops medium sized, necks small, roots tapering slightly, but uniformly stump-rooted and smooth; color deep orange-red; flesh very crisp and tender; medium early; a heavy cropper.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.25

### DANVER'S HALF-LONG

A great favorite; big cropper; the roots are smooth and handsome, medium size, tapering uniformly to a blunt point and of a rich, dark orange; fine for table or stock feeding. Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.25



Routledge Model—Coreless.

Tillamook, Ore., Feb. 21, 1916.

Dear Sirs: I was very much pleased with the Seeds received from you last year. Everything came good.

We received first prize at the County Fair on Routledge's Model Carrots. They are certainly a fine variety.

Very truly,  
W. L. VEATCH.

## STOCK CARROTS

### LONG ORANGE IMPROVED

The best of the long carrots, especially for stock; color bright orange, with long, tapering roots, requiring a deep soil.

Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 75c

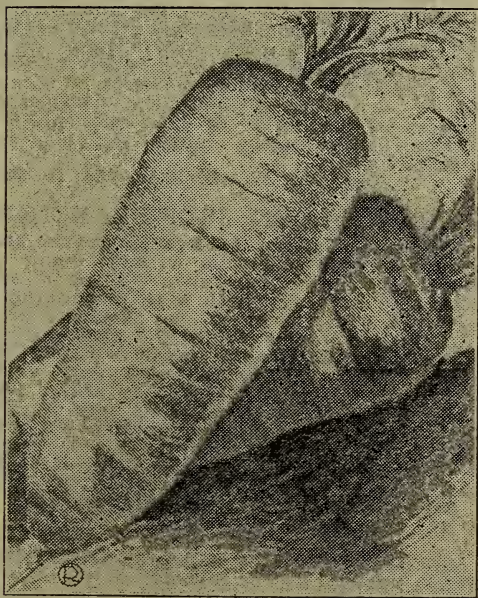
**GUERANDE, OR OXHEART.**—Bright orange, broad at the top and terminates abruptly in a small tap root. Length about 5 to 6 inches; very fine grained and sweet. Excellent for shallow soils.

Pkt. 5c; oz. 10c; 4 oz. 30c; lb. 85c

**LARGE WHITE BELGIAN.**—Extensively grown for stock feeding; roots pure white, green above ground and growing to a large size; flesh rather coarse.

Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 75c

See description **ROUTLEDGE MAMMOTH** Carrots next page.



Chantenay.

## Dad's Electric Lantern

The best and safest light for the farmer. No matches or danger of fire around the barns. See page 121.



## CARROTS—Continued

### Routledge Mammoth Stock Carrot

The heaviest cropping carrot grown, yielding more tons to the acre than any other sort. The flesh is yellowish-white, crisp and solid, and very sweet in flavor. It is a vast improvement on the Belgian sorts, which have been favorites in the past, as it is not only much more productive, but vastly easier to handle. The roots are short and very heavy at the shoulder, rendering them easily harvested. Too much can scarcely be said of their size and great productiveness. The roots frequently measure 15 to 20 inches in circumference, and 18 to 40 tons to the acre is not an extravagant statement as to yield.

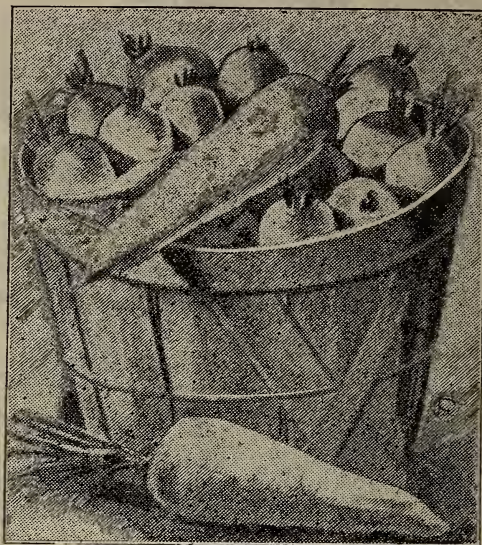
Large pkt. 10c; oz. 15c; 4 oz. 40c; lb. \$1.25; 2 lbs., enough for 1 acre, \$2.00.

Amboy, Wash., Feb. 21, 1916.

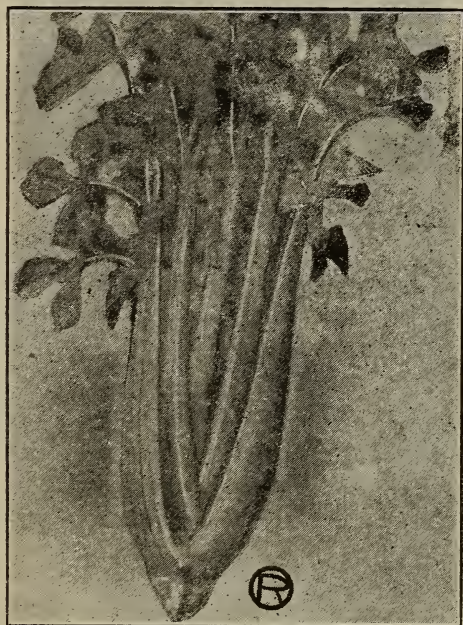
Dear Sirs: We have been using your seed for the past three years and find them true to name. Our neighbors come and look at our Mammoth Stock Carrots. They grow to about 30 tons to the acre and we stack them in our root cellar just like cord wood. The people cannot believe it until they come and see them.

Yours,

G. CROMWELL.



Routledge Mammoth.



Paris Golden Self-Blanching.

### GIANT PASCAL

Excellent for fall or winter use, and has increased in popularity every year. A large, tall grower of the finest nut flavor, being free from any bitter taste. Very broad stalks, blanching very quickly with little banking up; an admirable keeper.

Pkt. 5c; oz. 25c; 4 oz. 75c; lb. \$2.50

### Winter Queen

One of the best winter varieties, and highly recommended. It is tall and forms a large bunch. The leaves are light green.

Pkt. 5c; oz. 25c; 4 oz. 75c; lb. \$2.50

Highest  
Quality

## CELERY

Plants  
Page 34

Republic, Wash., May 22, 1916.

Gentlemen: I got Celery Seed from you last year and I had wonderful big stalks. People who had an opportunity to sample my Celery said they never tasted better.

Respectfully,

MRS. ALEX. A. ANDERSON.

### R. R.'S WHITE PLUME

Our Leading Early White Celery.

A handsome, crisp sort, of very easy cultivation. Naturally its stalks and portions of inner leaves and heart are white, so that by closing the stalks, either tying or by simply drawing the soil up against the plant and pressing it together, the work of blanching is completed without the troublesome process of "banking" or "earthing up." It is the earliest celery known, delicious and fine flavored.

Pkt. 10c; oz. 25c; 4 oz. 75c; lb. \$2.50

### PARIS, GOLDEN SELF-BLANCHING

The finest strain of French grown seed. This splendid variety is without doubt the most popular celery grown. It is a self-blanching sort, for with a little banking or covering, even the outer ribs assume a beautiful golden yellow, while the heart or vine stalks are deliciously tender, brittle and sweet. This variety is being very extensively grown both for market and private use, not only on account of its ease of cultivation, but for its superior quality. It is not quite so early as the White Plume, but is of heavier and more compact growth, the stalks being thick, crisp and brittle.

Select quality: Pkt. 10c; ¼ oz. 35c; oz. \$1.25; 4 oz. \$4.00.

### GOLDEN YELLOW SELF-BLANCHING.—

Same variety of celery as above, but is American grown. It is equal to most seeds offered, but not as true, dependable or of such high quality as the French grown stock.

Pkt. 5c; oz. 75c; 4 oz. \$2.25



## CUCUMBERS

Routledge Highest Quality Cucumber.



### Routledge Highest Quality

A quick grower and always commands "fancy prices" on account of its fine form and superb quality.

It is the earliest white spine cucumber, suitable for table, market or shipping purposes, under all conditions of culture, whether under glass or in the open ground.

Color a very deep green, which it retains during a long period, while in symmetry of form it is so regular, so uniform, as to create comment wherever seen.

Quality is superb, being exceedingly brittle and crisp. The flavor is delicate and entirely devoid of the bitter taste so frequently noticed in other varieties.

Pkt. 10c; oz. 15c; 4 oz. 40c; lb. \$1.25

### Arlington White Spine

One of the best sorts for table use. Vines vigorous, fruiting early and abundantly. Fruit uniformly straight, light, bright green in color, with a few white spines. Flesh crisp, tender and of excellent quality.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.00

### Improved Long Green

The leading large variety. Fruit from 10 to 12 inches long, dark green, crisp and tender. A good variety for slicing, and when ripe they are the best for sweet pickles. We offer "Highest Quality" seed that will grow long and uniform fruit.

Pkt. 5c; oz. 15c; 4 oz. 35c; lb. \$1.00

### Davis' Perfect

As now selected, the long, even fruits are of fine form, with an intensely dark rich green skin. The solid white flesh is of superb quality for slicing. So handsome and regular are the fruits, even when grown outside, that they bring an extra price on the market, often being taken for "hot-house grown." The vines are of strong growth and quite prolific.

Per pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.25

**JAPANESE CLIMBING.**—A vigorous grower, can be trained on a trellis or the garden fence, thereby saving ground space. Fruit from 12 to 16 inches long, dark green and smooth. Flesh pure white, crisp and tender. Pkt. 5c; oz. 15c; 4 oz. 35c; lb. \$1.25

### Lemon Cucumber

New. Highly recommended by all who have tried it for slicing and salads. Resembles a lemon both in size, form and color. Has a distinctive and delicious flavor superior to and not found in any other cucumber. A variety of real merit—try it.

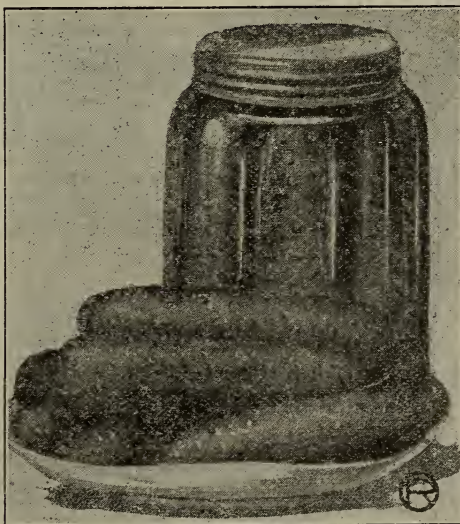
Pkt. 10c; oz. 25c; 4 oz. 75c

### Boston Pickling

A distinct variety, very popular for pickles; color bright green, a great producer and of excellent quality. It is for producing medium-sized pickles that this variety is so highly esteemed. If the fruits are gathered as soon as large enough, the vines will continue bearing through a long season.

Pkt. 5c; oz. 10c; 4 oz. 30c; lb. 75c

**EARLY SHORT GREEN.**—A very early and productive variety, bright green, rather short, straight and a little smaller at the ends. Crisp and tender. Good for pickling or slicing. Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 75c



Boston Pickling.

**USE WONDER.**—So many of our customers tell us of the wonderful results, the increased yield and quick growth obtained by using our Odorless "Wonder" Fertilizer, that we again call YOUR attention to it. CHEAPEST BECAUSE IT'S THE BEST. See page 37.



## Selected CORN—SWEET OR SUGAR Northern Grown

Packet and single pound prices only prepaid. Add postage to 10 lb. prices if wanted by mail. Write for quantity price.



Routledge Selected Golden Bantam.

### Routledge Superb

We do not hesitate to recommend this new sweet corn to our customers. Its earliness, hardness, size and quality make it of real merit to the western planters. It is extremely early, almost two weeks ahead of Golden Bantam and one week ahead of Portland Market. The large ears are always well filled with 12 to 14 rows of large, plump, white, sweet grains, of handsome appearance and excellent quality. (See illustration, front cover.) Stock limited. Large pkt. 15c; lb. 30c; 10 lbs. \$2.25

### Portland Market

An Oregon introduction, a very early large eared sweet corn and very productive. It's large well-filled ears, together with its plump, sweet grains of purest white, makes it a most profitable home or market variety.

Large pkt. 10c; lb. 25c; 10 lbs. \$1.50

### Early Evergreen

This fine variety is 10 to 12 days earlier than Stowell's Evergreen and yields large, handsome, 10 to 12-rowed ears. An excellent variety to follow the first early kinds. Near Portland it will make a late or main crop variety.

Large pkt. 10c; lb. 25c; 10 lbs. \$1.50

### Routledge's Selected Golden Bantam

**Flavor.**—Without exception, Golden Bantam Corn is the richest in flavor of all varieties; a sweet corn of which one will never tire. The first trial of this delicious Sweet Corn creates a taste "like more."

**Earliness.**—Golden Bantam Sweet Corn is one of the earliest sweet corns. It matures quickly and is suitable not only for early planting (on account of its hardness), but a succession of sowings may be made which will give continuous supply until fall.

**Color.**—When picked at the proper stage of its growth the kernels are a rich, creamy yellow and unsurpassed in quality.

**Growth.**—Being dwarf in its growth, with stalks small in size, it can be planted quite close, and a large crop may be obtained on a small area. The ears are 8 to 10-rowed, and about 6 inches long—just the right size for the table.

Remember our selected strain is northern grown, better flavored and truer than most seed offered.

Price: Large pkt. 10c; lb. 25c; 10 lbs. \$1.75.

### Peep o' Day

Extremely early and of excellent flavor and quality. Ears medium sized. Stalks quite dwarf and can be planted quite close, thereby securing a large crop off a small space. An ideal white sweet corn for the home garden.

Large pkt. 10c; lb. 20c; 10 lbs. \$1.75.

### Early Minnesota

This old and deservedly popular variety is one of the best early sorts for the market.

Large pkt. 10c; lb. 20c; 10 lbs. \$1.25

### Early Mammoth

Medium early. Ears large and well filled, sweet and of good quality. Planted early it will produce a large, profitable crop.

Large pkt. 10c; lb. 20c; 10 lbs. \$1.25

### Black Mexican

An extra fine variety, unsurpassed for sweetness. Seed bluish-black when ripe. Highly praised; a great favorite with many.

Large pkt. 10c; lb. 25c; 10 lbs. \$1.50

### Stowell's Evergreen

A good main crop or late sort. Remains longer in green state than any other. Very large ears, with deep grains, and remarkably sweet. Locally it must be planted early to mature.

Large pkt. 10c; lb. 20c; 10 lbs. \$1.25

## POP CORN

**WHITE RICE.**—Most popular and profitable kind; short ears, white, pointed kernels.

Large pkt. 10c; lb. 20c; 10 lbs. \$1.25

**FIELD CORN**—Don't overlook what we have to offer in OREGON-GROWN FIELD CORN; "the best ever." See page 44. CORN PLANTERS, see index.



## CORN SALAD

**Fetticus or Lamb's Lettuce.**—This is a hardy winter salad, the small leaves being served like lettuce during the cool fall and early winter months. It does not succeed during warm weather, and the seed should be sown thickly in drills during August, September, and October to supply fresh leaves during the cool fall and winter months. It is quite hardy, and after cold weather sets in can be protected by a thin mulch of soft hay or straw.

Pkt. 5c; oz. 10c; 4 oz. 30c; lb. 75c

## CELERIAC

**Turnip Rooted Celery.**—The roots, which are the edible portion, keep well for winter use and are excellent for soups and stews. They are also cooked and sliced as a salad. Sow seed at the same season and give the same treatment as any root crop.

**LARGE ERFURT.**—An improved form, producing large, smooth roots, which are nearly round.

Pkt. 5c; oz. 25c; 4 oz. 75c

## EGGPLANT

Sliced and fried takes the place of meat. Culture same as for tomatoes.

**NEW YORK IMPORTED SPINELESS.**—Considered the best variety. Oval shaped, deep purple, large size and fine flavor.

Pkt. 10c; ½ oz. 25c; oz. 40c; 4 oz. \$1.25

## ENDIVE

This plant furnishes an attractive and appetizing salad for the fall and winter months or by repeated sowings a supply may be had nearly all the year round. Useful in flavoring soups, stews, etc. Makes delicious greens if cooked like spinach. Cultivation same as for lettuce. The bleaching of Endive is brought about by drawing the leaves together into a head and tying them and this should be done a month before it is wanted for table use.

**BROAD LEAVED BATAVIAN.**—Leaves are broad, thick, green, more or less twisted and waved with white mid-ribs. It forms large hearts, which when blanched, form one of the best winter salads. Crisp, tender and fine flavor.

Pkt. 5c; oz. 10c; 4 oz. 35c

**GREEN CURLED.**—The hardest of all, with beautifully curled dark green leaves, tender and crisp.

Pkt. 5c; oz. 10c; 4 oz. 35c

**WHITE CURLED.**—Very tender and light green, blanches easily, very ornamental.

Pkt. 5c; oz. 10c; 4 oz. 35c

## HORSE-RADISH ROOTS

Will form radishes of large size in one season's growth. For prices, see Vegetable Plants and Roots, page 107.

## KALE, or BORECOLE

This is a popular boiling-green resembling cabbage in flavor. The plant is entirely hardy in well-drained soil and can be grown easily from seed planted during the summer and fall months. With the tall varieties it is customary to pull off the lower leaves and let the plant grow on to furnish a continuous supply. The sweetness and flavor of these greens are improved by freezing weather.

**DWARF GREEN CURLED.**—Beautifully curled, bright green leaves, tender and of fine flavor.

Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 85c

**TALL GREEN CURLED.**—Grows about 2 feet high; leaves dark green; curled and wrinkled; very hardy.

Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 85c

**THOUSAND-HEADED.**—For stock feeding. See Field Seeds, page 43.

## KOHL-RABI

A delicious vegetable. In growth this is half-way between cabbage and turnip; the edible portion is the large bulb which forms on the stem above the soil. By making successive sowings, tender bulbs may be had throughout summer and fall, and are highly esteemed for their mild, delicate, cabbage-like flavor. Slice and boil, discarding the hard lower part of bulb. Sow in drills or raise and transplant like cabbage 6 to 10 inches apart.

**EARLY WHITE VIENNA.**—Extremely early, medium size, excellent quality.

Pkt. 5c; oz. 25c; 4 oz. 70c

## LEEK

Belongs to the onion family and culture is about the same. Hardy, and freezing improves the flavor. Hill up to whiten.

**AMERICAN FLAG.**—Mild and sweet; long, large stems; hardy and of the finest quality.

Pkt. 5c; oz. 20c; 4 oz. 50c

**CARENTAN.**—Very broad, thick stems of good flavor. Very large variety.

Pkt. 5c; oz. 20c; 4 oz. 50c

## Pleased Customers Our Best Advertisers

Gaston, Ore., Aug. 20, 1916.

Gentlemen: We got some Portland Market Corn seed last spring from you, and I tell you it was fine. The Corn is the very best in both quantity, earliness and quality of any corn I ever raised. It also is sweet and tender and good for eating for four or five weeks. The other seed you sent were all good, especially the Early Irish Cobbler Potatoes; everyone admired them.

M. W. EARL.

St. Johns, Ore., Sept. 2, 1916.

Routledge Seed & Floral Co.

Gentlemen: Your "Golden Bantam Corn" is lovely and has such a fine flavor. All the stalks average well and are very prolific.

Yours very truly,

MRS. GRACE ROSS.

Albany, Ore., Nov. 6, 1915.

Dear Sirs:

I am writing to you, thinking you would like to hear of the success I had with the order of seeds and plants I received from you in the spring.

The seed all did well, were strong and vigorous plants, especially the Routledge Prize Peas were so prolific. The White Globe Onions, from seed bought of you, won first prize at our recent School Fair. I never grew better Tomatoes and the Turnips were extra fine. The Field Corn did well. The Sweet Potato Plants thrived through all the difficult weather of a wet spring and dry summer, and I get good sized Potatoes equal to the California Sweets. The Flowers grew and bloomed well.

Yours truly,

MRS. FRANK LINES.

On Cucumber and Garden Plants use "Bug Death" for Insects (see page 117), and "WONDER FERTILIZER" (see page 37), and you will be more than pleased with results.



## LETTUCE

### Grand Rapids

Very popular with private gardeners and as a lettuce for greenhouse forcing. It will stand shipping better than most curled sorts. Of quick growth and stands for some days after being fit to cut. The plant is upright, and forms a loose head or cluster of large, bright green leaves, finely crimped and ruffled; rather thin, good flavor, crisp and tender. Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.25

**SIMPSON'S EARLY CURLED.**—A very extensively used early loose-leaved, or clustering variety. Leaves light green, slightly frilled, crisp, sweet and tender.

Pkt. 5c; oz. 15c; 4 oz. 35c; lb. \$1.00

**EARLY PRIZE HEAD.**—A large, clustering, non-heading lettuce, most excellent for the home garden and undoubtedly the most easily grown variety in cultivation. It is too tender, however, to stand shipping or handling on the market. Leaves finely curled and crumpled, bright green tinged with brownish red, very crisp, tender and sweet. Pkt. 5c; oz. 15c; 4 oz. 35c; lb. \$1.00

### Trianon Cos or Romaine

**EARLY WHITE COS—Self Folding.**—Distinct in having long, narrow, spoon-shaped leaves, folding into loose, sugar-loaf-shaped heads which blanch better by having the outer leaves drawn about them and tied. Leaves yellowish white, crisp, tender and of a distinct and pleasing flavor.

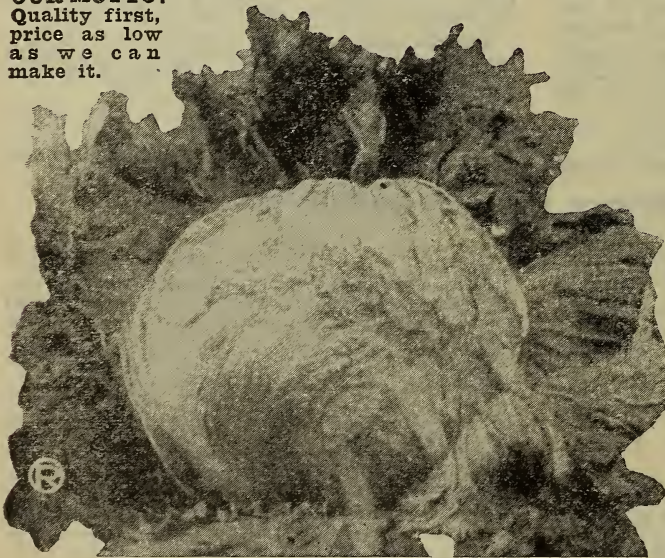
Pkt. 5c; oz. 15c; 4 oz. 35c; lb. \$1.00

### Big Boston—Improved

Plants large, very hardy and vigorous. Leaves broad, comparatively smooth, wavy at edges, thin, very firm and crisp; color bright light green, slightly tinged with reddish brown. Grown extensively in the South for shipment north in the winter. It usually heads up under cold weather conditions better than any other variety.

Pkt. 5; oz. 15c; 4 oz. 40c; lb. \$1.25

**OUR MOTTO:**  
Quality first,  
price as low  
as we can  
make it.



R. R.'s Wonderful.



Grand Rapids.

### HANSON

**Improved Hard Heading Stock.**—The leading head lettuce. We can recommend this as one of the very best. Heads green outside and white inside; grow to a remarkable size; very solid, and is deliciously sweet, crisp and tender. It withstands the hot sun.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.25

Umatilla, Ore., July 15, 1916.  
Routledge Seed & Floral Co.

Gentlemen: The R. R.'s tender crisp Lettuce seed you sent me for testing was sure great. It is the tenderest and sweetest Lettuce I ever ate.

Yours truly,  
L. M. BULLACK.

### R. R.'s Wonderful

A reselected, hand-picked strain of the original New York or Wonderful. Our grower has given this stock special attention and it is a wonderful strain. It produces immense heads of closely folding ruffled leaves. The heart blanches beautifully and is crisp, tender and delicious. A robust variety, rooting deeply and thus able to resist hot, dry weather; slow to seed and a sure header. The outer color is of a distinct apple-green. A rapid grower and unsurpassed as a home or market lettuce.

Pkt. 10c; ½ oz. 15c; oz. 25c;  
4 oz. 60c; lb. \$2.00.

**A NEW STRAWBERRY**—Read about the wonderful "Marvel," a new variety of sterling merit, most delicious of all—page 110.



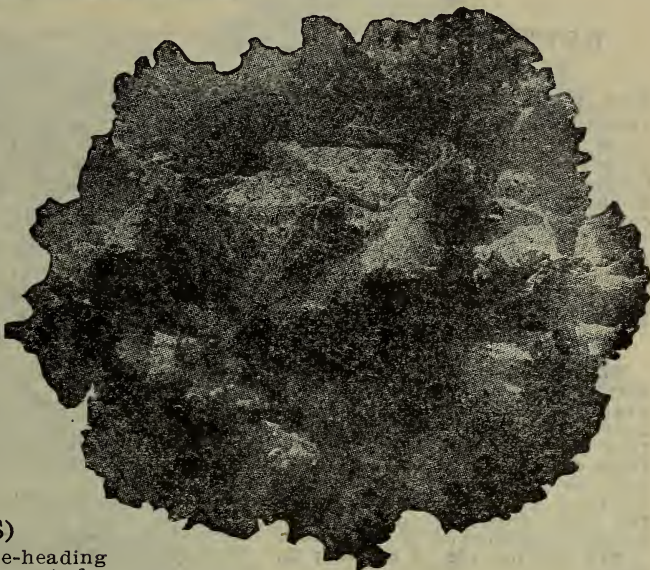
## LETTUCE—Continued

### R. R.'s Tender Crisp

A distinct and extra choice variety for those who like curly, crisp, tender Lettuce of the finest quality.

Grows to a large size, makes most desirable heads of pleasing appearance, and retains its crispness and mild flavor to a greater degree during the hot summer months than any other crisp-head variety. While especially adapted for midsummer, it is most desirable also for spring and fall. The plants are of quick, strong growth; the leaves are of a soft, bright green, growing closely around the heads, which are tightly folded and blanch to a silvery white, and crisp and brittle as could be desired.

Pkt. 10c; ½ oz. 15c; oz. 25c; 4 oz. 60c; lb. \$1.75.



**R. R.'s Tender Crisp Lettuce.**

### NEW YORK (LOS ANGELES)

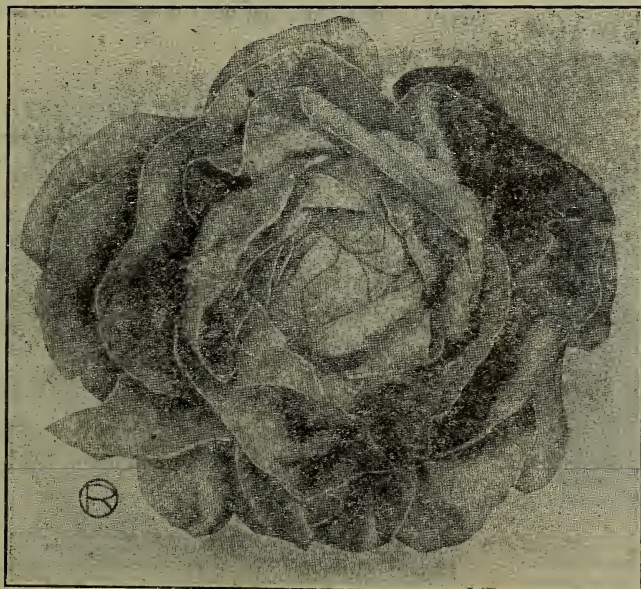
A large, crisp, curly-leaf, close-heading lettuce of the finest quality. A great favorite in the markets of Los Angeles and San Francisco. Carloads of this variety are shipped by California growers and it brings the highest prices.

Pkt. 5c; oz. 15c; 4 oz. 50c; lb. \$1.75

### Early May King

The plants are of quick growth, practically all head and extremely handsome. From early spring plantings in the open ground they grow quickly to a diameter of 6 to 7 inches with the broad, light-green outer leaves folding closely about the round solid head. The inner leaves (practically the entire head) are blanched to a rich golden yellow and have a specially fine, rich, buttery flavor.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.50



**Wayahead—Extra Early.**

### CALIFORNIA CREAM BUTTER

A very popular variety for autumn and winter use. Forms a very large head, which is very buttery and of a rich golden yellow inside. The leaves are thick and of bright green, slightly tinged with brown on top of head.

Pkt. 5c; oz. 10c; 4 oz. 30c; lb. \$1.00

### IMMENSITY

A very large-heading variety, one of the largest of the cabbage sorts; larger than California Cream Butter, which it resembles in color and shape. It is especially adapted for planting in the fall and winter, and makes a fine, tender, buttery head.

Pkt. 10c; oz. 15c; 4 oz. 35c; lb. \$1.25

### Way-a-head Extra Early

A new lettuce showing a remarkable combination of earliness, firm heading character, handsome appearance and fine quality. Both in cold-frames early in the spring and in the open ground—in spring, summer and early fall months—it has proved to be not only the earliest and one of the surest heading of all early lettuce, but also of the very finest quality. It is not only earlier than May King and other fine early varieties, but the tightly folded heads are generally larger in size. The outer leaves are a light green, with the inner head finely blanched to a rich buttery yellow. We urge you to try this new variety (see cut).

Pkt. 10c; ½ oz. 15c; oz. 25c; 4 oz. 60c; lb. \$1.75.

**PLANT SMALL FRUITS** around your garden. What's nicer than delicious fresh fruit, fresh from your garden? See Fruit Department, pages 108 to 112.



## MUSKMELON

### NETTED ROCK OR ROCKY FORD

The most popular and best seller among Muskmelons.

The fruit is oval and completely covered with a beautiful lace-like netting. Flesh very thick; green, very sweet, luscious, melting and superb flavor. The fruit is wonderfully uniform in shape and quality. The favorite everywhere.

Pkt. 5c; oz. 15c; 4 oz. 30c; lb. \$1.00.

**BURRELL'S GEM** — Select Strain. — A new, medium-sized, oval variety, well ribbed and covered with a fine grayish netting and having reddish orange flesh of fine, spicy flavor, sweet and delicious, distinct flavor. There is a growing demand here for the fine-grained, smooth, salmon, red-fleshed Muskmelons.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.25.

**THE HOODOO.** — One of the best of recent introductions. It is early and prolific. The fruit is of medium size, the seed cavity very small, the rind very thin indeed, and the edible fleshy part thick and meaty. It is of orange or salmon color, the type much preferred now; but its great charm is its flavor, which is par excellence. Test it.

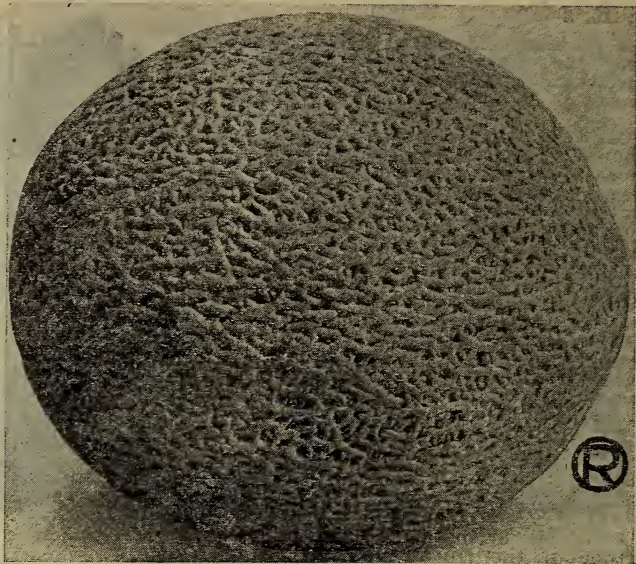
Pkt. 10c; oz. 15c; 4 oz. 40c; lb. \$1.25

**MONTREAL IMPROVED NUTMEG.** — Valued for its size and delicious flavor. Round in shape, with remarkably thick green flesh. One of our handsomest varieties.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.25

**OSAGE, OR MILLER'S CREAM.** — Medium to large, flesh thick, deep salmon, of excellent quality, rich and sweet; skin dark green, slightly netted and ribbed. A favorite variety for the later markets.

Pkt. 5c; oz. 10c; 4 oz. 30c; lb. \$1.00



Netted Rock—Rocky Ford.

**LARGE YELLOW CANTALOUPE.** — A distinct type and very popular with all who have tried it. The fruit is large, oblong, slightly ribbed and coarsely netted. The flesh is light yellowish green, very sweet, crisp and delicious.

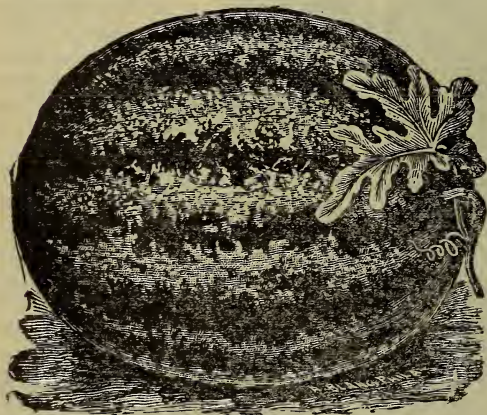
Pkt. 5c; oz. 10c; 4 oz. 30c; lb. \$1.00

### Golden Beauty Cassaba

Fall and Winter Muskmelons.

Skin wrinkled, flesh thick, excellent flavor and fine aroma. When nearly ripe pick and stow away in a cool, dark place until the rind becomes slightly softened and moist. Melons will actually keep until February. Pkt. 10c; oz. 20c; 4 oz. 60c; lb. \$2.00

## WATERMELON



Routledge's Oregon Prize.

### ROUTLEDGE'S OREGON PRIZE

We offer this new Melon with the assurance that it is not only remarkably early, but as sweet, delicate and melting in flavor as any variety grown.

The flesh is of a deep scarlet; rind thin, and on this account is not a particularly good shipping sort, but is emphatically the variety for home use and sale. It will ripen in altitudes where it has not been thought possible to mature a good watermelon.

Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. \$1.25

**COLE'S EARLY.** — One of the best early sorts; medium size, green skin and red flesh. Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 75c

### KLECKLEY'S SWEET

Unsurpassed for home use or near markets. Vine vigorous and productive; fruit of medium size, oval; color dark green; flesh very bright, rich red and exceedingly sweet.

Pkt. 5c; oz. 10c; 4 oz. 30c; lb. 85c

**Cuban Queen.** — A very vigorous grower; early, very solid and heavy; of most delicious flavor.

Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 75c

**Citron, Red Seeded.** — Flesh white and solid, used exclusively for pickles and preserves.

Pkt. 5c; oz. 15c; 4 oz. 35c

Seed and Reference Tables, Amount to Plant, etc., see complete reference tables inside back cover. Always refer to "Index," pages 3-4, for anything wanted.



## MUSHROOM SPAWN

**LAMBERT'S PURE CULTURE SPAWN.**—Mushrooms may be grown in any place where conditions of temperature and moisture are favorable. A shed, cellar or cave may be utilized to advantage for this purpose. It is essential that the temperature be maintained from 53 to 60 degrees F., and that the moisture be properly regulated. Lambert's Pure Culture Spawn is far superior to the old-style varieties, and much better results can be obtained from its use. The bricks should be broken into pieces about two inches square and planted from 10 inches to a foot apart. Bricks weigh from 18 to 20 ounces. A brick will spawn 10 square feet of bed. With Lambert's Pure Culture Spawn it is impossible to raise poisonous mushrooms.

**DIRECT SPAWN.**—Latest and best. Mammoth White, Cream White or Bohemian Brown.

Price, per brick, not prepaid, 25c; 10 bricks, \$2.25; add postage at rate of 1½ lbs. per brick. Write for quantity price.

## MUSTARD

The leaves of mustard make excellent greens of sharp, pungent flavor, and are cooked the same as spinach or beet leaves.

**SOUTHERN GIANT CURLED.**—Large variety, forming a great mass of beautiful leaves, which are ruffled and finely curled on the edges; hardy, vigorous, highly recommended. Pkt. 5c; oz. 10c; 4 oz. 20c; lb. 60c

## Ostrich Plume

Leaves dark green, beautifully curled and plume-like. Very vigorous and productive, stands well. Of distinctive flavor; superior to spinach for greens and excellent for salad.

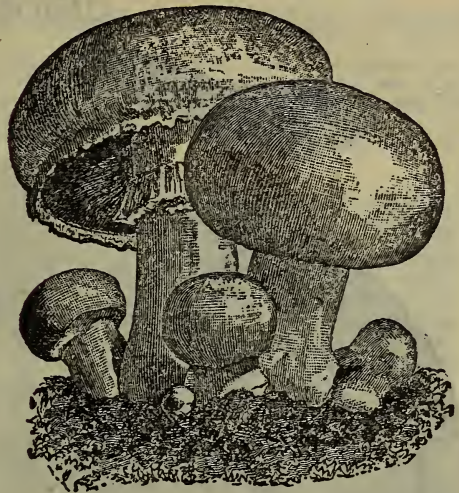
Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 85c

**White English.**—Light green variety; tender leaves; seed light yellow.

Pkt. 5c; oz. 10c; 4 oz. 15c; lb. 40c



Routledge Prize Taker (see next page).



Mushrooms.

**MUSHROOM CULTURE.**—We have a 32-page booklet on Mushroom Culture, nicely illustrated, for 25c, postpaid. Free with an order for 10 bricks.

## VALUABLE BOOKS

We offer many practical and up-to-date books that you will find of interest. Why not gain in a few hours' study what others learned by years of hard work. See pg. 122.

## OKRA

**IMPROVED DWARF GREEN.**—Very productive; long, slender green pods.

Pkt. 5c; oz. 10c; 4 oz. 25c

## ONION SETS

**BOTTOM ONION SETS.**—These small onions are grown from seed that have been sown too thick to attain a large size. The small onions (about ½-inch in diameter) thus obtained are planted out and are ready in a short time to pull as green onions for the table.

Per lb. 20c; not prepaid, 15c, or 4 lbs. 50c. Write for low prices by the 100 lbs.

**TOP SETS.**—Lb. 25c, postpaid.

**SHALLOTS.**—Valuable for bunching or for an early crop. Each bulb makes several small onions, which are to be pulled off when large enough.

Per lb. 25c; 5 lbs. \$1.00, prepaid

## ONION

### Highest Quality—True Seed

#### Extra Early Red Flat

The first Red Onion to ripen. A medium-sized, flat variety; an abundant producer and very uniform in shape and size; fine grained, mild flavored, and comes into use nearly two weeks earlier than the Large Red Wethers-field; very desirable for early market use.

Pkt. 5c; oz. 20c; 4 oz. 50c; lb. \$1.75

**YELLOW DANVERS.**—A popular and well-known variety. Earlier and flatter than above. Excellent for bunching green.

Pkt. 5c; oz. 20c; 4 oz. 50c; lb. \$1.75

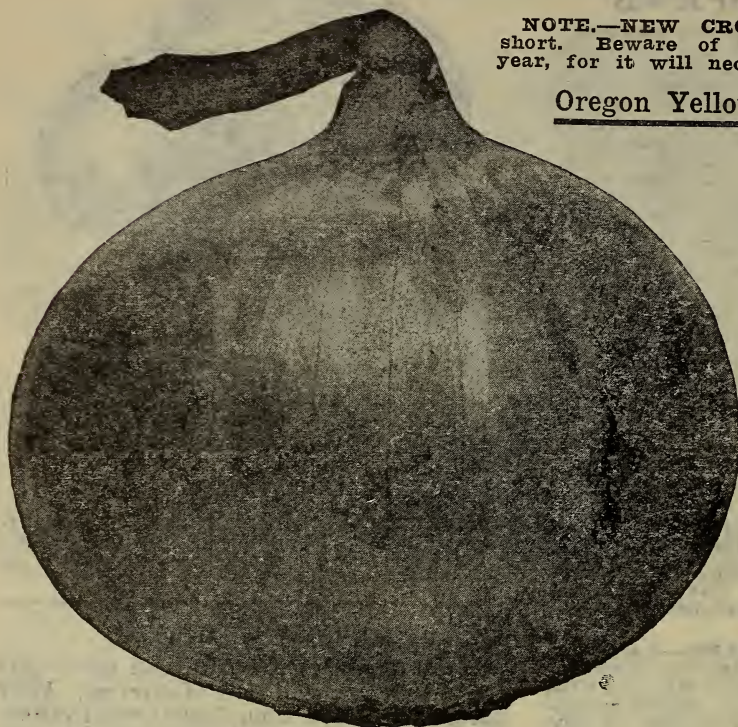
**DON'T** Practice false economy by buying low-priced seeds. Our motto—"HIGHEST QUALITY," price as low as we can make it.



## ONION—Continued

**NOTE.—NEW CROP ONION SEED** is very short. Beware of **LOW PRICED SEED** this year, for it will necessarily mean **OLD SEED**.

### Oregon Yellow Danvers



Oregon Yellow Danvers Onion.

This is the variety planted almost entirely in the Northwest, particularly in Oregon. The largest crops of onions and the best keepers, bringing the highest prices in the Pacific Coast and Middle Western markets, are the Oregon Yellow Danvers. The bulbs are uniformly large, of a half-globe shape, with small necks. It is the earliest, largest in size, most perfect in shape, the largest cropper and the best keeper, and as a market or table onion cannot be excelled. **Our seed is grown specially for us by the best onion seed growers in Oregon.** No onion grower can afford to plant anything inferior when such seeds can be obtained at the following prices:

Pkt. 5c; oz. 25c; 4 oz. 65c; lb. \$2.25.

### Routledge Prize Taker

This onion has become a great favorite on account of its large size and great solidity. It is perfectly globe-shaped, with straw-colored skin; the necks are very small and the onions always ripen up hard. An excellent keeper, exceedingly fine flavor, grows to an enormous size, onions weighing 5 pounds having been grown from seed the first year.

Pkt. 5c; oz. 20c; 4 oz. 60c; lb. \$2.00

### Yellow Globe Danvers

One of the most extensively used yellow onions. Bulbs of good size, uniformly globe-shaped, with small neck, and ripen very evenly. Flesh white, crisp and of mild and excellent flavor. An enormous yielder and a fine keeper. We offer a select strain, unsurpassed.

Pkt. 5c; oz. 20c; 4 oz. 60c; lb. \$2.00

### Large Red Wethersfield

The Standard variety of the red onions. Of large size, half globe, a heavy yielder, and one of the best for keeping. Skin a deep purplish red, smooth and glossy; will do better on fair upland soil than most varieties; flesh white, rather strong.

Pkt. 5c; oz. 20c; 4 oz. 60c; lb. \$2.00

**EXTRA EARLY RED FLAT.**—(See page 21.)

### Crystal White Wax

A large, pure white, flat onion. During the last few years it has become very popular. Extremely early and one of the mildest and sweetest of all. It is very fine for slicing, the color being so clear and pure. We offer the genuine imported true seed.

Pkt. 10c; oz. 40c; 4 oz. \$1.00

Prosser, Wash., Mar. 15, 1916.

Gentlemen: The seeds that I received from you last year gave perfect satisfaction. I am planning a larger garden this year and expect to be as well pleased.

MISS CECILE CROFUTT.

Wedderburn, Ore., Feb. 26, 1916.

Gentlemen: I found your seeds to be excellent last year. I, therefore, order again. Send the enclosed order by mail as soon as possible.

Yours truly,

M. DOYLE.

### Australian Brown

Its remarkable keeping qualities and handsome appearance makes it very desirable. Resembles the Yellow Danvers in general appearance, but has a clear, amber-brown skin. It matures early, ripens uniformly and is a good, long keeper.

Pkt. 5c; oz. 20c; 4 oz. 50c; lb. \$1.60

### Southport White Globe

An enormous yielder and superb keeper; perfect globe-shaped, very large, clear white skin and considered one of the handsomest varieties grown. We offer the very finest stock obtainable.

Pkt. 10c; oz. 25c; 4 oz. 65c; lb. \$2.50

### WHITE PORTUGAL or Silverskin

The finest flavored of all the white-skinned onions. Quite early, flat shaped and a fine cropper. Planted thickly in broad drills makes fine pickling onions.

Pkt. 5c; oz. 25c; 4 oz. 65c; lb. \$2.25

### WHITE BARLETTA—Queen

An early white variety; prized for early gardens and pickling on account of its small size, pure white skin and remarkable keeping qualities. Of very quick growth, flat shaped and fine, mild flavor.

Pkt. 10c; oz. 25c; 4 oz. 75c; lb. \$2.75

**DO YOU SEND EAST for your Seeds?** It's bad policy. Spend your money on this Coast. Here's where you sell your products. Our Seeds are highest quality.



**"Highest Quality"****GARDEN PEAS****Hand Picked**

There is a vast difference in "strains" of garden peas. You will find our stock "very superior," healthy, vigorous and true, much better than the average seed sold by wholesale seed dealers and jobbers. This year we offer some new English introductions that we have imported for our private trade—try them if you want "Highest Quality."

Packet and single pound prices only are prepaid—add postage to 10 lb. prices if wanted by mail. **WRITE FOR QUANTITY PRICES.**

**ALASKA.**—An extra early, exceedingly hardy pea. Pods of perfect shape, well filled with smooth peas of unrivaled quality. Height 2½ feet. Can be planted much earlier than the wrinkled peas.

Large pkt. 10c; 1b. 20c; 10 lbs. \$1.20

**R. R.'s Prosperity**

The Earliest Large Podded, Sweet Garden Pea to date.

It is hardy and can be planted fully as early as Alaska.

This grand, large podded, extremely early, prolific variety, is vigorous and robust, growing to a height of about 4 feet. It is exceedingly early for a wrinkled variety, being only a few days later than the earliest smooth sorts.

The pods are very large, and are invariably well filled with from 8 to 10 sweet, luscious, tender, wrinkled peas of large size and delicious flavor.

The peas remain tender and sweet for some time after they are large enough to use. Its heavy yield and excellent quality makes it a most profitable market variety.

Large pkt. 15c; 1b. 30c; 10 lbs. \$2.00; 25 lbs. \$3.75.

**LITTLE MARVEL**

An extremely valuable variety, especially suited to small home gardens, and early market. It matures very early and produces large crops. Vines 15 to 18 inches high. The pods are dark green, good size, produced in pairs and are closely filled with 6 to 7 peas of extra fine flavor.

Large pkt. 10c; 1b. 25c; 10 lbs. \$1.75; 25 lbs. \$3.00.

**NOTTS EXCELSIOR and PREMIUM GEM.**—We discarded these two kinds for "Little Marvel," a superior variety in every way.

**Sherwood (King Edward)**

A splendid new pea, produces in great profusion the largest pods of any early dwarf variety and the pods are filled with 8 to 10 large deep-colored peas of the most delicious flavor and quality. Very hardy. Height 15 to 18 inches.

Large pkt. 15c; 1b. 30c; 10 lbs. \$2.35

**DWARF TELEPHONE—Daisy**

A splendid mid-season variety, growing only about 18 inches in height; vines very stout and bear a good crop of large, well-filled, bright green pods. The pods average 5 inches in length, containing 7 to 9 large peas which are tender and sweet. A popular sort.

Large pkt. 10c; 1b. 20c; 10 lbs. \$1.50; 25 lbs. \$3.00.

**GOOD LUCK—Te-a-wha**

You will certainly be delighted with this new variety. Sturdy, dark green vines, 2 feet high, covered with large pods containing 9 to 11 superb flavored peas that retain their color and flavor longer than most kinds. Ten days later than Duke's Delight. Excellent for the home or market gardens.

Large pkt. 10c; 1b. 30c; 10 lbs. \$2.00



Duke's Delight (Page 23).

**AMERICAN WONDER.**—A well-known early dwarf garden pea. We prefer "Duke's Delight"—more productive and superior in every way. Pkt. 10c

**Duke's Delight**

A very dwarf, extra early delicious pea of great merit.

Our regular customers are now demanding it in preference to American Wonder, Notts and Gem varieties.

Duke's Delight easily outclasses these old popular kinds in productiveness, size and fullness of pods, color, sweetness and flavor. The sturdy, stocky, healthy vines grow about 12 to 14 inches high. Every grower praises it. Read report below.

Large pkt. 15c; 1b. 30c; 10 lbs. \$2.00; 25 lbs. \$3.75.

Pendleton, Ore., Mar. 14, 1916.

Gentlemen: We consider "Duke's Delight" the best Peas we have ever raised and have recommended them to all we know who have a garden.

All seeds received from you last season grew fine and we were well pleased with all of them.

Yours truly,  
F. M. EDWARDS.

**Routledge Prize**

Largest pods, sweetest peas, most productive main crop variety. SEE PAGE 25.

Be sure you read about Mulford's Culture for inoculating pea seed. Increases the yield and improves the soil. (See page 35.)



## Highest Quality Garden Peas—Continued

Remember, a little extra cost at planting time will bring "dollars" or greater satisfaction at harvest time. Packet and single pound prices only, prepaid. White for quantity price.

**BURPEE'S "BLUE BANTAM."** — Unequaled for extreme earliness, superb quality, and unusual productiveness. The dwarf vigorous vines average 15 inches in height and carry really enormous crops of large, deep bluish-green pods. The handsome pointed pods average 4 inches long and are tightly packed with 7 to 8 extra large, deep bluish-green peas. These peas are not only large in size, but of most luscious flavor. The pods are ready to pick as early as an American Wonder, and almost double the size.

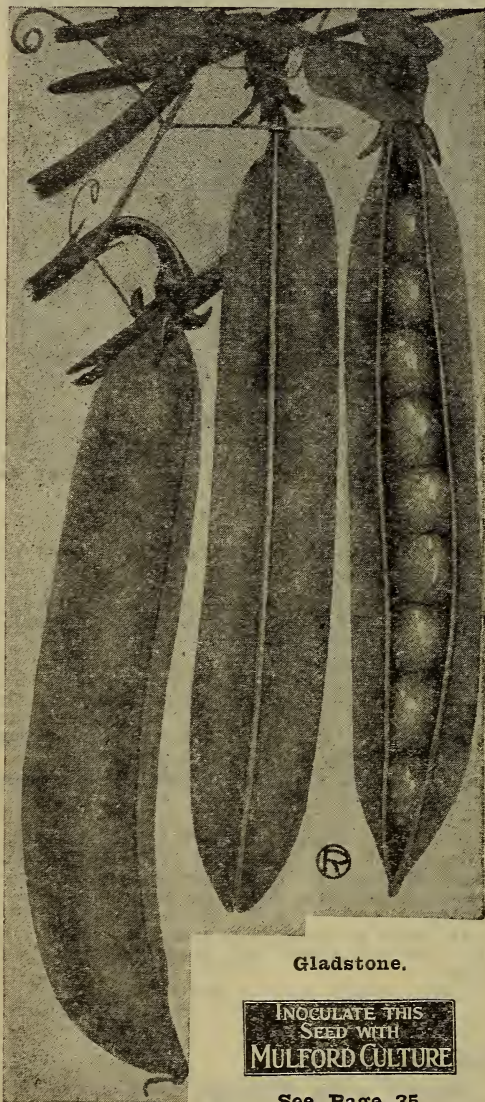
Large pkt. 10c; lb. 25c; 10 lbs. \$1.75

St. Johns, Ore., Sept. 2, 1916.

Routledge Seed & Floral Co.

Gentlemen: I found your "Burpee's Blue Bantam Peas" very prolific and of sweet flavor. I will surely have them in my garden next year.

Yours very truly,  
MRS. GRACE ROSS.



Gladstone.

INOCULATE THIS  
SEED WITH  
MULFORD CULTURE

See Page 35.

### Richard Seddon

The pods are deep green, crowded with from 7 to 9 large peas of very fine color and flavor. Grows from 16 to 20 inches in height. An extremely early type, maturing only a week later than the Alaska, when sown at the same time. **A splendid all-around early variety.** On account of its immense productivity, evenness of maturity, compact well filled pods and excellent color and quality, it is especially desirable for canning purposes.

Large pkt. 10c; lb. 25c; 10 lbs. \$1.75

### Gradus

Extra early. This popular large-podded wrinkled pea of finest quality matures pods only two or three days later than the small-podded round-seeded extra earlies. Vines four feet high. It produces uniformly large pods, measuring from four to four and a half inches in length, nearly round, and well filled with very large, handsome peas of the finest flavor.

Large pkt. 10c; lb. 25c; 10 lbs. \$1.50; 25 lbs. \$3.00.

### Gladstone

**A grand new second-early; productive of large, luscious, wrinkled peas.**

A new English variety of "highest quality." Aside from Routledge Prize it cannot be excelled for a main crop variety. The strong, sturdy vines grow about 3½ feet and are simply covered with extra large long, pointed and curved pods, that are always full to the end, of large, rich, luscious peas, the like of which the average gardener has never tasted. Try it; you will be delighted.

Pkt. 15c; lb. 30c; 10 lbs. \$2.00; 25 lbs. \$3.75

### IMPROVED STRATAGEM

A very productive semi-dwarf variety with large leaves and large pods. The peas are dark green, wrinkled, and large. It is planted in large quantities by gardeners for market. In quality it is unsurpassed, the peas when cooked being of the most delicious sweetness. Vines grow 18 inches to 2 feet high, and very stocky.

Large pkt. 10c; lb. 20c; 10 lbs. \$1.50; 25 lbs. \$3.00.

### DWARF SUGAR—EDIBLE PODS

A great favorite with many. In the Edible-Podded or Sugar Peas the pods are gathered, broken and cooked like string-beans when the peas start to develop in the pod or have reached about half their full size. Dwarf Sugar grows about 2 feet in height, producing a heavy crop of small flat pods about 3 inches in length.

Large pkt. 10c; lb. 25c; 10 lbs. \$2.00

### Special Pea Offer

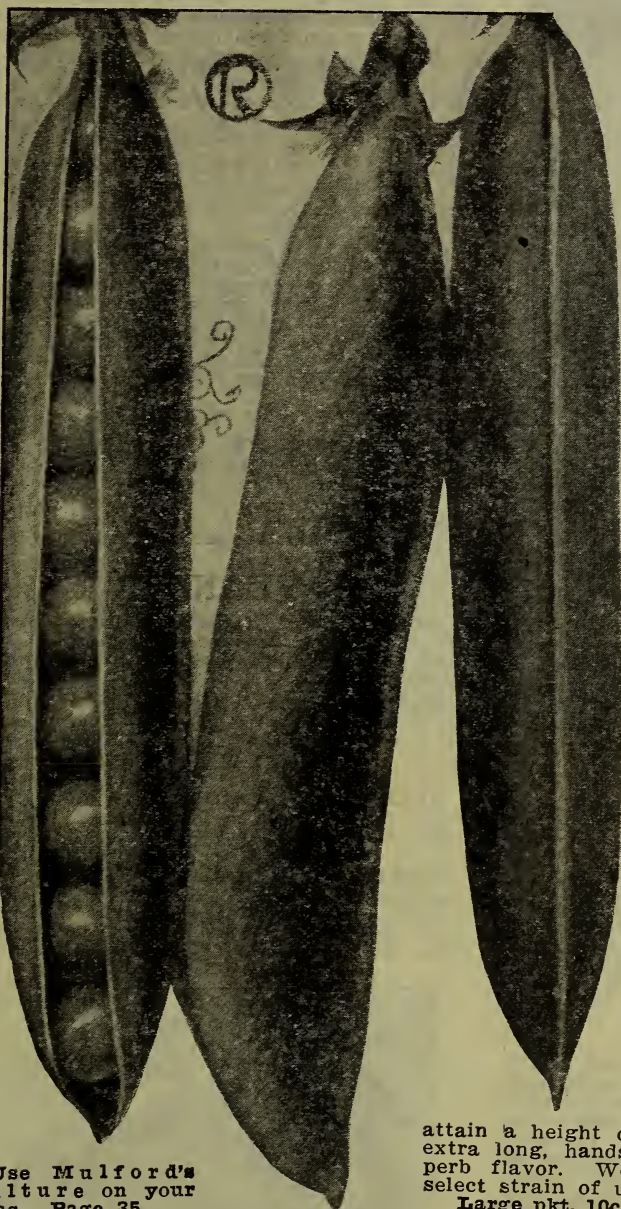
To give you a continuous supply of delicious peas at a special price, we offer 1 large packet of **RICHARD SEDDON, DUKE'S DELIGHT, SHEERWOOD, GOOD LUCK**, (all dwarf kinds) for only 35c, or 1 lb. each 85c, postpaid; or **R. R.'S PROSPERITY, GLADSTONE and ROUTLEDGE PRIZE**, (all tall kinds) for only 30c, or 1 lb. each 65c, postpaid.

Market Gardeners who buy Peas in quantity should write us for prices, stating variety and amount wanted. Single pound prices only are prepaid. See notes top of page 23.



## Peas—Continued—Large Podded, Late or Main Crop

Packet and single pound prices only, postpaid. Special quantity price on request.



### Routledge Prize

A new, sweet, wrinkled, mammoth podded Pea of extra value.

This reselected, new strain, grown especially for us in New Zealand, will be found true to name. A sturdy, healthy grower. Vines and pods are a deep, rich green. A bushel of Routledge Prize pods will shell out nearly twice as many peas as a bushel of Telephone. The vines are enormously productive, being completely covered with immense long pods, well filled with from 8 to 11 large peas of the richest flavor. This variety grows about 4 feet high and, as an abundant cropper is superior to all other sorts.

Nothing in the line of peas excels the Routledge Prize in richness, sweetness and flavor. We are sure our customers will agree with us after testing this new pea. Try them and report results if you will.

Large pkt. 10c; lb. 25c; 10 lbs. \$1.75; 25 lbs. \$3.50.

Chewelah, Wash.

Gentlemen: The Peas you sent me have just come into maturity and they are large, fine and sweet; never saw anything to equal them.

MRS. J. C. ACHIN.

Albany, Ore.

Dear Sirs: All your seeds did well, especially Routledge Prize Peas; they were so strong and prolific.

MRS. FRANK LINES.

Garibaldi, Ore., Feb. 22, 1916.

Gentlemen Please send me two pounds of Routledge Prize Peas. These are the finest Peas we have ever grown.

GEORGE GREEN.

### Telephone

One of the most popular and largest peas we have. Vines attain a height of 4½ feet, bearing profusely the extra long, handsome pods; tender, sweet and superb flavor. We offer a very carefully rogued, select strain of unusual merit.

Large pkt. 10c; lb. 20c; 10 lbs. \$1.50; 25 lbs. \$3.00

Routledge Prize.

Use Mulford's Culture on your Peas. Page 35.

## PARSLEY

**CHAMPION MOSS CURLED.**—An English strain, with beautiful moss-curved foliage; vigorous grower.

Pkt. 5c; oz. 15c; 4 oz. 30c; lb. 90c

**ARLINGTON EXTRA CURLED.**—Very choice strain, having the greatest possible curl to the leaves and the darkest green color; a very vigorous grower; will stand heat and drought better than any other.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.25

**PLAIN LEAF.**—Single-leaved variety, very fine and excellent flavor.

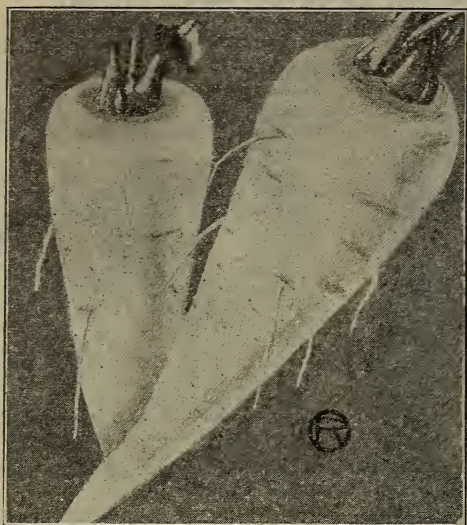
Pkt. 5c; oz. 15c; 4 oz. 35c



Parsley Leaf.

**TREAT** your PEAS, BEANS and SWEET PEAS with Mulford's Nitrogerm Cultures. Makes them healthy and vigorous, insures a full crop. See page 35.





Sweet Marrow Parsnips.

## PEPPER

Plant seed early in the spring; culture same as for tomatoes. Plants in season. See **Vegetable Plant List**, page 34.

### Ruby King

One of the most popular large red peppers. Plants grow 2 feet high and bear a fine crop of handsome, extra large, scarlet fruits. The flesh is quite thick, sweet, and so mild that the peppers may be eaten from the hand like an apple. Especially fine for mangoes.

Pkt. 10c; oz. 30c; 4 oz. 90c

### Pimiento

This is a sweet Pepper—one which you will enjoy eating in salad, either fresh or canned. Gardeners are planting Pimiento largely. Quite large, top shaped, very thick flesh and wonderful mild flavor.

Pkt. 10c; oz. 40c; 4 oz. \$1.25

### Large Bell or Bull Nose

Sometimes called Sweet Mountain. The plants are vigorous, about 2 feet high, compact and very productive, ripening their crop uniformly and early. The fruits are large, with thick, mild flesh of excellent quality for use in salads and mangoes or stuffed peppers. The color is deep green when fruit is young, bright crimson when ripe.

Pkt. 5c; oz. 25c; 4 oz. 75c

**RED CHILI.**—A small, pointed, bright red variety. The pods are used in making chili and pepper sauce, and are very pungent and hot; very productive.

Pkt. 5c; oz. 25c; 4 oz. 85c

**CAYENNE.**—Long, red, pointed pods; very strong and used largely for making pepper sauce; popular variety.

Pkt. 5c; oz. 25c; 4 oz. 75c

**CHERRY RED.**—Rich, glossy, scarlet fruit at maturity; small, smooth and round; of dwarf habit.

Pkt. 5c; oz. 25c; 4 oz. 90c

## PARSNIP

While highly appreciated for the table the great value of the parsnip for stock feeding is but little known. The roots are very rich in saccharine food, adding to the richness of the milk when freshly dug and fed to cows.

**Culture.**—Sow as early in the spring as the weather will admit in drills 18 inches apart and  $\frac{1}{2}$ -inch deep, in a rich, deep soil; thin out 3 to 6 inches apart in the rows. The quality of the roots is improved by leaving them in the ground over winter for spring use.

### Sweet Marrow

This fine new parsnip of English origin is offered with full confidence that it will become a prime favorite with all who use it. It is very fine grained and exceedingly sweet, while the peculiar "parsnip" flavor is fully preserved. The roots are unusually smooth and attractive in appearance. The best of all parsnips for the private or market gardens.

Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 60c

**HOLLOW CROWN.**—The most popular variety; medium length roots, very smooth and of the finest quality. Derives its name from a depression at top of crown or root; very fine table sort.

Pkt. 5c; oz. 10; 4 oz. 20c; lb. 50c

## PEANUTS

As we have had many calls for peanuts for planting and know that they do fairly well in the Northwest, we offer two good kinds.

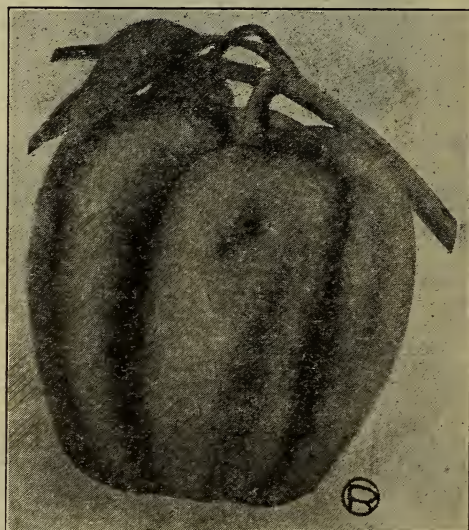
**Culture.**—Remove the shell carefully so as not to break the skin and plant 10 inches apart in rows, cover 2 inches. Warm, sandy, rich loam soil is best. When grown, pull up and dry in the sun.

**IVERSON'S IMPROVED.**—Early, large and productive, yielding few imperfect pods and less "pops" than any other sort.

Pkt. 10c; lb. 40c

**EARLY SPANISH.**—Although small, this variety is especially adapted to the north. Yields heavily, pods solid and unusually well filled. Sweeter and more delicious than the larger varieties.

Pkt. 10c; lb. 40c



Ruby King Pepper.

**POSTPAID.**—All seeds in packets and single pounds are postpaid. You can't afford to send East. We save you time and money.



## PURE SEED POTATOES

We offer a few varieties of special merit that we recommend to our friends and customers. We think it is folly to plant ordinary or common stock. Many gardeners insist on the best vegetable seeds, but plant any old kind of potatoes, not knowing whether they are early or late. Get a start of some of our select seed stock and you will be more than pleased with the results.

**ABOUT PRICES**—Prices are subject to important market changes. Ask for quotations on larger lots. Good, true, healthy stock of the best named Seed Potatoes are never plentiful and are always in demand. Order early; we expect potatoes will advance at planting time.

### Extra Early Irish Cobbler

The most reliable extra early white-skinned potato; so uniform in growth that every hill seems to ripen all at one time. Form oval and round; slightly flattened; skin creamy white, and having few eyes, which are quite shallow; flesh pure white and of the finest quality; not excelled by any variety; its earliness, uniformity, large yield, fine quality and very handsome appearance make the Extra Early Cobbler a popular and profitable variety for market or home garden use; compact grower and can be planted closer.

Price, not prepaid, add postage if wanted by mail, 1 lb. 10c; 5 lbs. 30c; 10 lbs. 50c; 50 lbs. \$1.75; 100 lbs. \$3.00.

### EARLY ROSE

This variety has been a great favorite for many years. Our stock is as fine as can be obtained.

Price, not prepaid, add postage if wanted by parcel post, 5 lbs. 25c; 10 lbs. 40c; 50 lbs. \$1.50; 100 lbs. \$2.75.

### Early White Ohio

We have so many calls for the Ohio Potato that we have decided to list them. After trying both varieties, we favor the white-skinned variety. It is a handsome potato, very productive and early. A good keeper, excellent in quality, even quite young, and very popular with those who know it. Stock limited this season. Prices not prepaid; add postage if wanted by mail. 5 lbs. 25c; 10 lbs. 40c; 50 lbs. \$1.60; 100 lbs. \$3.00.

### Extra Early Bovee

Earlier than Early Rose and always produces large crops of even, good-sized tubers. With good soil and cultivation, it will out-yield most any other variety. Skin smooth and flesh color, flesh white and excellent quality.

Prices: 5 lbs. 25c; 10 lbs. 40c; 50 lbs. \$1.60; 100 lbs. \$3.00.

### American Wonder

The American Wonder is one of the best all-around white potatoes in cultivation and very popular for early or main crop. A strong grower and a great producer; tubers white, uniform in size, elongated, of excellent quality.

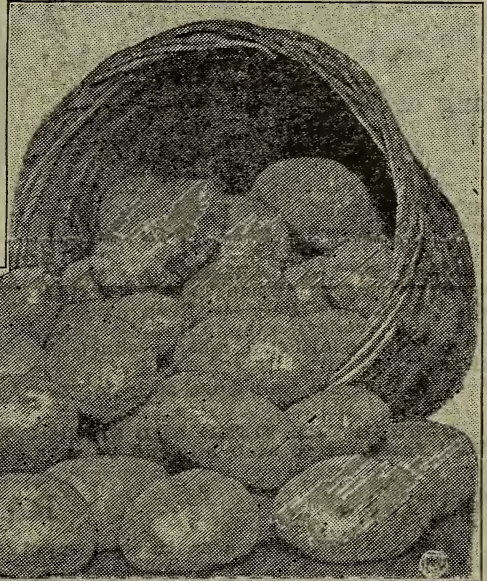
Price, not prepaid, add postage if wanted by parcel post: 5 lbs. 25c; 10 lbs. 40c; 50 lbs. \$1.50; 100 lbs. \$2.75.

Gaston, Ore., Mar. 7, 1916.

Dear Sirs: Am writing to inform you that our Seed Potatoes, Peas, etc., arrived in good condition and look fine. Have planted the Early Cobblers and will plant Peas as soon as present rain is over.

Many thanks for the Flowering Bulbs. Will give them good care and am sure I will have some nice flowers.

Respectfully yours,  
MRS. M. W. EARL.



Irish Cobbler, Extra Early.

### Pride of Multnomah

This potato, originating in Multnomah County, has made a record for itself very quickly, and is in great demand as a commercial variety.

It is the heaviest yielding, most even growing main crop variety. The skin is smooth and white eyes shallow and cooking qualities unexcelled being fine grained and of snowy whiteness either boiled or baked. Withstands drought better than most varieties. We offer hand selected stock from an expert grower.

Price, not prepaid, add postage if wanted by parcel post, 5 lbs. 30c; 10 lbs. 50c; 50 lbs. \$1.50; 100 lbs. \$3.00. Small seed at a less price, write.

### Improved Burbank

A standard commercial variety. We offer hand selected stock that will yield much heavier than most.

Prices, not prepaid, 5 lbs. 25c; 10 lbs. 40c; 100 lbs. \$2.75; quantity price on request.

### Sweet Potato Plants

These are ready in May and June. See page 34.

Salem, Ore., Feb. 21, 1916.

Gentlemen: We used your seeds last year and had exceptionally good results from them, in particular your Early Irish Cobbler Potatoes. On May 10, 1915, I dug Potatoes for home use and found an average of over ten to the hill. These were sprouted in the house. Am doing the same this year.

I am yours,  
H. R. JONES.

We sell POTATO PLANTERS, FORKS, GARDEN and FARM TOOLS. Every gardener needs up-to-date tools and supplies. See pages 113 to 123.



## PUMPKIN

### Winter Luxury

An enormously productive variety of medium size and superior keeping qualities. Of rounding shape, about 10 inches in diameter; golden russet color; finely netted, rich deep golden flesh; sweet and tender. **By far the best for pies; try it.**

Pkt. 5c; oz. 15c; 4 oz. 30c; lb. \$1.00

**SMALL SUGAR.**—Fine grained, very sweet and excellent keeper. Skin deep orange yellow.

Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 75c

### King of Mammoths

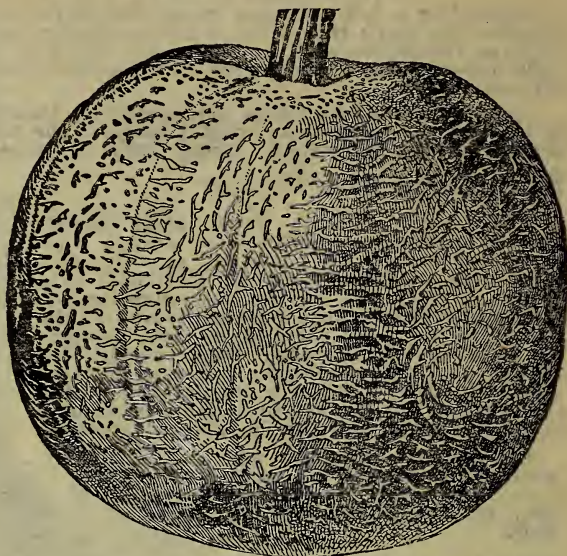
The largest of all the pumpkins; grow this variety to win the prizes at the fair.

Pkt. 10c; oz. 15c; 4 oz. 45c; lb. \$1.25

**CONNECTICUT FIELD.**—The best for field culture and excellent for stock. Pkt. 5c; oz. 10c; 4 oz. 20c; lb. 60c

**LARGE SWEET CHEESE.**—A popular variety; fruit flattened; skin mottled light green and yellow; flesh yellow, thick and tender; very nutritious and of excellent quality; a most productive variety.

Pkt. 5; oz. 10c; 4 oz. 20c; lb. 75c



Winter Luxury Pumpkin

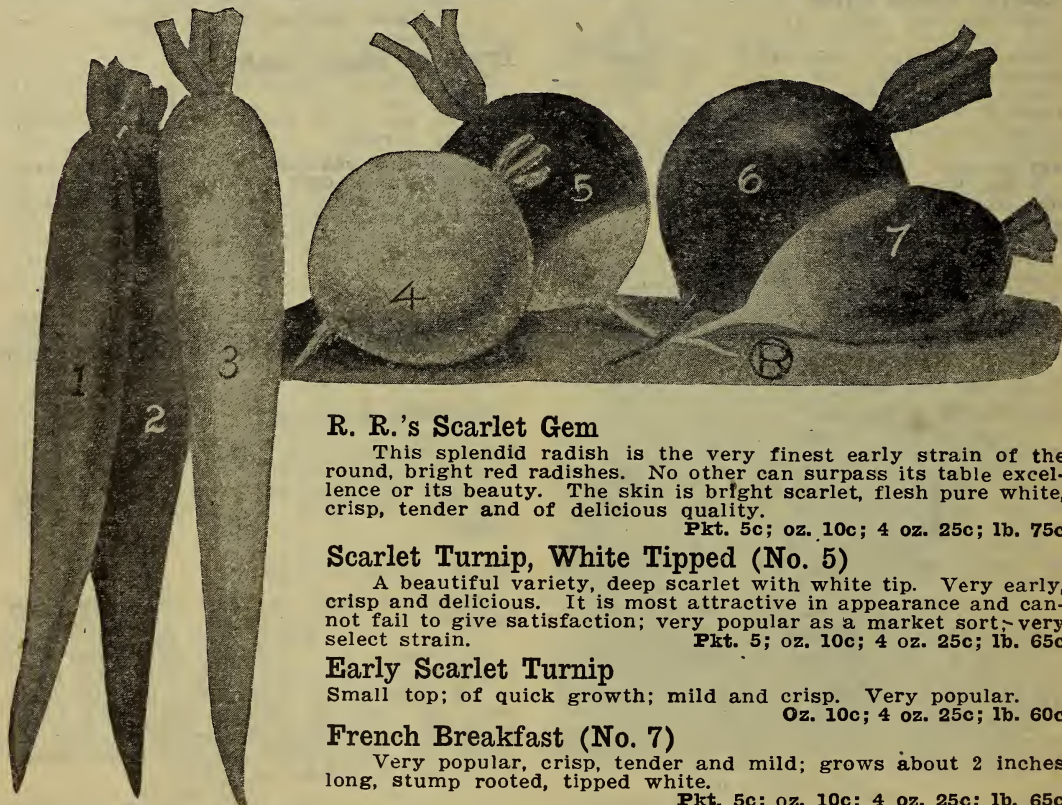
**DOUBLE THE YIELD AND SIZE OF YOUR PUMPKINS** by using a handful of "WONDER" Fertilizer to each hill and be sure you mix it well in the top soil. (See page 37.)

"Highest  
Quality"

## RADISH

"Highest  
Quality"

**REMEMBER**—For a continuous supply of crisp, tender Radishes, sow seed every week, as they remain in "prime" condition only a few days after attaining full size. For very early or late fall planting, raise the seed bed so it will drain and be warmer.



### R. R.'s Scarlet Gem

This splendid radish is the very finest early strain of the round, bright red radishes. No other can surpass its table excellence or its beauty. The skin is bright scarlet, flesh pure white, crisp, tender and of delicious quality.

Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 75c

### Scarlet Turnip, White Tipped (No. 5)

A beautiful variety, deep scarlet with white tip. Very early, crisp and delicious. It is most attractive in appearance and cannot fail to give satisfaction; very popular as a market sort; very select strain.

Pkt. 5; oz. 10c; 4 oz. 25c; lb. 65c

### Early Scarlet Turnip

Small top; of quick growth; mild and crisp. Very popular.

Oz. 10c; 4 oz. 25c; lb. 60c

### French Breakfast (No. 7)

Very popular, crisp, tender and mild; grows about 2 inches long, stump rooted, tipped white.

Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 65c

**DON'T** grow WORM-EATEN radishes. Use "CARCO"—New Discovery, see pg. 117.



## RADISH—Continued

Market Gardeners should write for our low prices in 10, 20 and 50-lb. lots.

**SCARLET GIANT (No. 6).**—Also called "Crimson Giant." The largest early scarlet turnip-shaped radish. The flesh is a sparkling white, solid, crisp, juicy and are of the mildest flavor. The bright, deep crimson color of the skin remains quite constant. **Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 65c**

### White Icicle (No. 3)

This superb radish is pure white and most attractive. It is not only crisp and tender when young, but retains these qualities until the roots attain large size. It is ready for use almost as quickly as the early turnip-shaped sorts.

**Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 60c**

**EARLY SNOWBALL (No. 4).**—Also called **Model White Box.** A grand improvement on the White Box or White Turnip Radish; very early, of a clear white color, solid, juicy, crisp, tender and unsurpassed in flavor.

**Pkt. 5c; oz. 10c; 4 oz. 20c; lb. 55c**

**LONG BRIGHTEST SCARLET, WHITE TIPPED (No. 1).**—The brightest and handsomest long scarlet radish known. Roots mature quickly and continue in good condition until full grown. Of excellent quality.

**Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 65c**

### Long Scarlet (No. 2)

Grows perfectly straight and smooth, 6 to 7 inches in length. Skin scarlet, very thin; the flesh crisp, brittle and of delightful flavor; the finest long red radish.

**Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 65c**

**WHITE STRASBURG.**—Even when comparatively small this variety is in good condition for use, and continues crisp and tender until matured, when the roots are 4 to 5 inches long and about 2 inches in diameter. This is considered one of the best large summer sorts.

**Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 65c**

## Winter Radishes

The merits of Winter Radishes are little appreciated. These grow to large size and keep well for winter and spring use. Sow seed in July and August. Early planting is not advisable.

### NERIMA—Japanese Long White

A late fall and winter radish that has recently made its appearance on the Portland market and created much favorable comment. It grows from 12 to 30 inches long and about 2 inches in diameter. Skin white and smooth, flesh firm, crisp, tender and mild. Very popular and in good demand; keeps well all winter.

**Pkt. 10c; oz. 20c; 4 oz. 50c**

**California Mammoth White.**—Also called **Chinese White Winter** or **Celestial.** A long, thick, stump rooted variety. Pure white. The flesh is tender and crisp, keeping well through the winter.

**Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 75c**

**SAKURAJIMA.**—Japanese variety that grows to an immense size, almost globe shaped. The skin is smooth and white, and the flesh is always mild, crisp and tender.

**Pkt. 10c; oz. 20c; 4 oz. 60c**

**China Rose.**—Bright rose color, flesh firm and piquant; largest at the bottom. One of the best.

**Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 75c**

**Long Black Spanish.**—Very popular; latest, as well as the hardest. Roots of medium size, oblong, black.

**Pkt. 5c; oz. 15c; 4 oz. 20c; lb. 65c**

**Round Black Spanish.**—Three or four inches in diameter; flesh white; good keeper.

**Pkt. 5c; oz. 10c; 4 oz. 20c; lb. 65c**

## RHUBARB OR PIE PLANT

**BURBANK'S CRIMSON WINTER.**—The new variety, which has become very popular and profitable to the grower, has a delicious fruity flavor, is extremely hardy, very prolific and very quick growing. Produces good stems all winter and spring.

**Pkt. 10c; oz. 60c; 4 oz. \$1.75**

**VICTORIA, OR MAMMOTH.**—Very large; most popular variety.

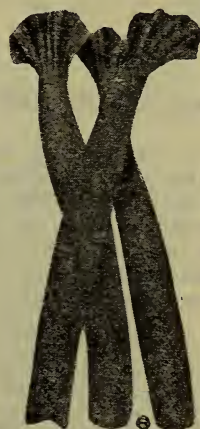
**Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.25**

**RHUBARB ROOTS.**—From October to June we can always supply one, two, and often larger clumps of Rhubarb Roots. Customers will save much valuable time by ordering roots instead of seed. For prices, etc., see page 107.

## SUNFLOWER

### Large Russian

This has very large single heads borne at the top of a single unbranched stalk usually, and with much more and larger seed than the common sorts. It is used extensively for feeding poultry. The plant often grows 10 feet high. Sow seed as soon as ground is fit for planting corn, in rows 3 to 4 feet apart and 10 inches apart in row. Cultivate same as corn. When the seed is ripe and hard, cut off the heads and pile loosely in an airy dry place where they will soon cure so as to be threshed out and cleaned. This variety will yield 1000 pounds or more of seed per acre. Some species are planted largely in the flower garden for ornament. (See **Flower Seeds** under **Helianthus**.) **Pkt. 5c; 4 oz. 10c; lb. 25c, postpaid;** for larger quantities inquire for prices.



Rhubarb.

See page  
107 for  
Roots

**EVER USE A LANTERN?** If you do, investigate **DAD'S ELECTRIC**—always ready—no danger from fire, makes "night time a light time." See page 121.



## SALSIFY OR VEGETABLE OYSTER

\* One of the most desirable winter vegetables. The roots when cooked are very palatable and nutritious and are served in a variety of ways. The flavor is similar to oysters. Salsify succeeds best in a light, well enriched soil, which should be stirred to a good depth. Coarse and fresh manure should be avoided, as it will surely cause the roots to grow uneven and ill-shaped. Sow early and quite deep, giving the general culture recommended for parsnip. The roots are perfectly hardy and may remain out all winter. Frost does not injure the roots; may be stored in a pit or in a very cool cellar.

### Mammoth Sandwich Island

This variety is large and strong growing with long, smooth, white, tapering roots, and is less liable to blight than the other sorts. It is invaluable for market gardeners' use. Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.25

## SPINACH

Plant in the richest soil you have very early in the spring or not until fall for winter use, as it does not do well in hot weather.

**IMPROVED THICK-LEAVED.**—A variety which grows very rapidly, forming a cluster of large, very thick, slightly wrinkled leaves of fine color and quality when cooked; best for market gardeners.

Pkt. 5c; oz. 10c; 4 oz. 20c; lb. 60c

**LONG STANDING.**—An improved variety of excellent quality for general use; slow going to seed. Remains in good condition longer than most. Dark rich green.

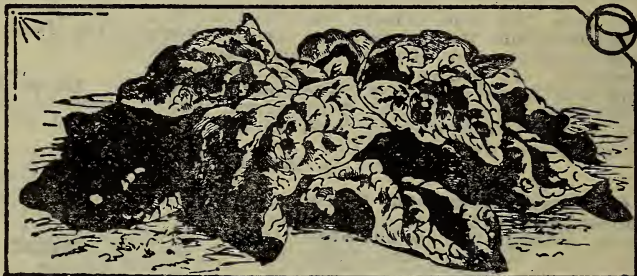
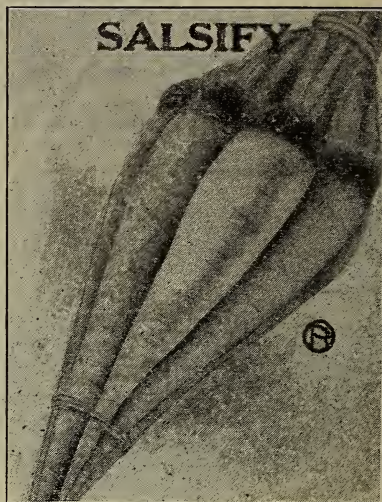
Pkt. 5c; oz. 10c; 4 oz. 15c; lb. 50c

**BLOOMSDALE SAVOY LEAVED.**—Very early; of upright growth; leaves broad and pointed, dark green, fine quality; grows quickly. Good for all seasons.

Pkt. 5c; oz. 10c; 4 oz. 20c; lb. 50c.

**PRICKLY WINTER.**—Very desirable; very hardy and easily grown; bears large, smooth broad pointed leaves. Color, bright green. A fine winter and spring variety.

Pkt. 5c; oz. 10c; 4 oz. 20c; lb. 60c.



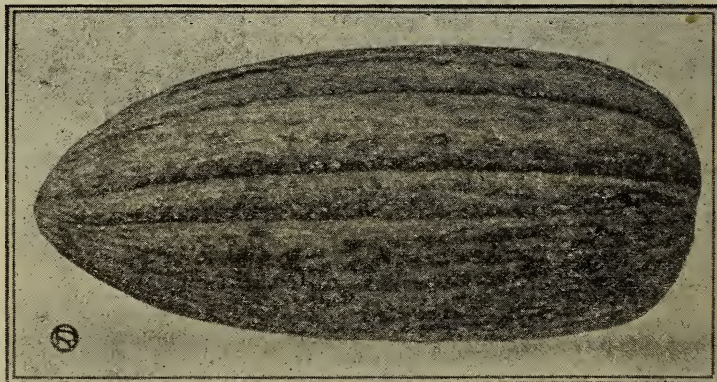
Improved Thick Leaved.

## SQUASH

### Delicata Squash

A perfect all-season squash. A summer and winter crop on one plant. Produces 15 to 20 fruits to a vine that are as deliciously flavored as the winter kinds.

Delicata grows in vine form. It is ready almost as soon as the early summer sorts, is better flavored than the best of them, and remains in perfect condition as long as any of the keeping varieties.



Delicata Squash—Try It.

Its flavor when cooked has been compared to the Sweet Potato, others liken it to roasted chestnuts, but all agree that it is delicious. The fruits are about 9 inches long, and as shown in the cut, slightly ribbed. When ripe, the ground color is deep yellow, irregularly striped and marbled with dark olive-green.

The flesh is thick, of fine texture, and pale-yellow in color. It is unexcelled for baking—the shape and size make it perfect for this purpose. When boiled it turns out dry, mealy and sweet. Excellent for pies.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50



## SQUASH—Continued

### Mammoth White Bush Scallop

The fruit is a beautiful, clear, waxy white; superior in size and beauty, and is quite uniformly warted. The handsomest of the scalloped squashes. The stock we offer is exceptionally true to type. **Pkt. 5c; oz. 15c; 4 oz. 30c; lb. 85c**

### Golden Summer Crookneck

Early and prolific. The fruits are of the true crookneck type, heavily warted and of light golden color. One of the most popular sorts for home and market.

**Pkt. 5c; oz. 15c; 4 oz. 35c; lb. 90c**

**VEGETABLE MARROW.**—Very early, oblong variety; fruit dark green at first, becoming marbled and striped with yellow and lighter green as they mature. Very fine flavor fried in oil, or stewed; use while small.

**Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 65c**

**YELLOW BUSH SCALLOP.**—A very early, flat, scallop variety of large size; color yellow; flesh pale yellow and well flavored.

**Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 75c**

## Fall and Winter Varieties

**BOSTON MARROW.**—A popular variety for canning; large oval fruit; skin bright reddish orange, with light cream netting; flesh rich orange, fine grained and of excellent quality.

**Pkt. 5c; oz. 10c; 4 oz. 30c; lb. 70c**

### Mammoth Chili

The largest of all squashes, growing to an enormous size, often weighing over 200 pounds, while its rich, fine flavored flesh insures its value for all purposes. Its size makes it valuable for stock feeding. **Pkt. 5c; oz. 15c; 4 oz. 35c; lb. \$1.25**

### Golden Hubbard

The same in size, shape and quality as the well-known Hubbard Squash, except that it is a bright red or golden color and somewhat earlier. It is also a long keeper; considered by expert judges to be one of the very best fall and winter sorts yet introduced. Matrices before the frosts; is vigorous and wonderfully productive. In flavor it has no equal. **Pkt. 5c; oz. 15c; 4 oz. 35c; lb. \$1.10**

### Delicious

Finer-grained and more delicious than the well-known Hubbard. The color of skin is green or blue-black. Medium size, weighing from 5 to 10 pounds. The shell is not very thick, but is hard and strong; small

seed cavity; the flesh is very thick, of a bright yellow color, fine-grained and of splendid quality. For table use, either as a fall or winter squash, it cannot be excelled. **Pkt. 5c; oz. 15c; 4 oz. 35c; lb. \$1.00**

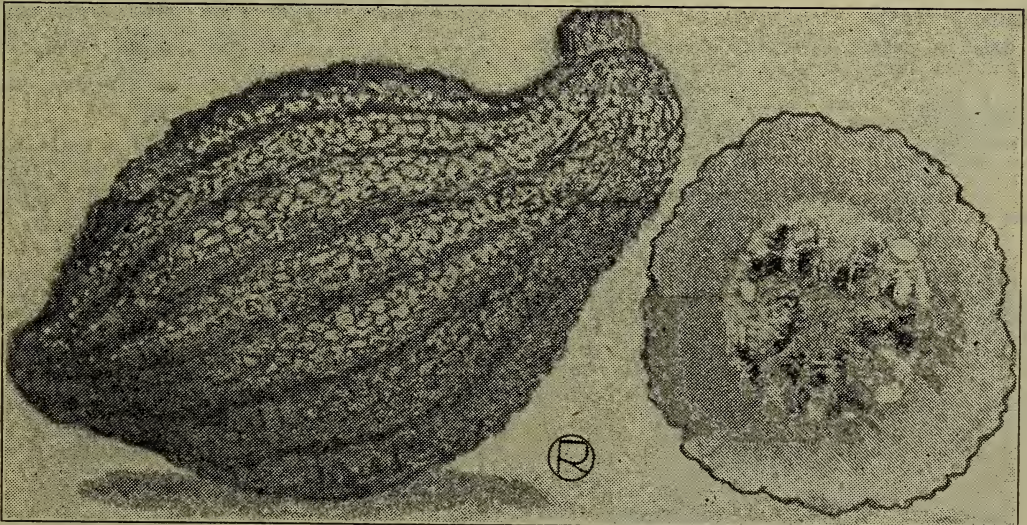
### True Hubbard

One of the best of the winter squashes. Vines vigorous and very productive. Fruit large, heavy, moderately warted, with very hard shell. Skin uniformly dark bronze green. Flesh bright orange yellow, fine-grained, thick, dry and richly flavored. Can be kept in good condition until spring. Our seed is carefully selected and is much superior to most offered.

**Pkt. 5c; oz. 15c; 4 oz. 35c; lb. \$1.00**



See DAD'S  
ELECTRIC  
LANTERN,  
page 121.



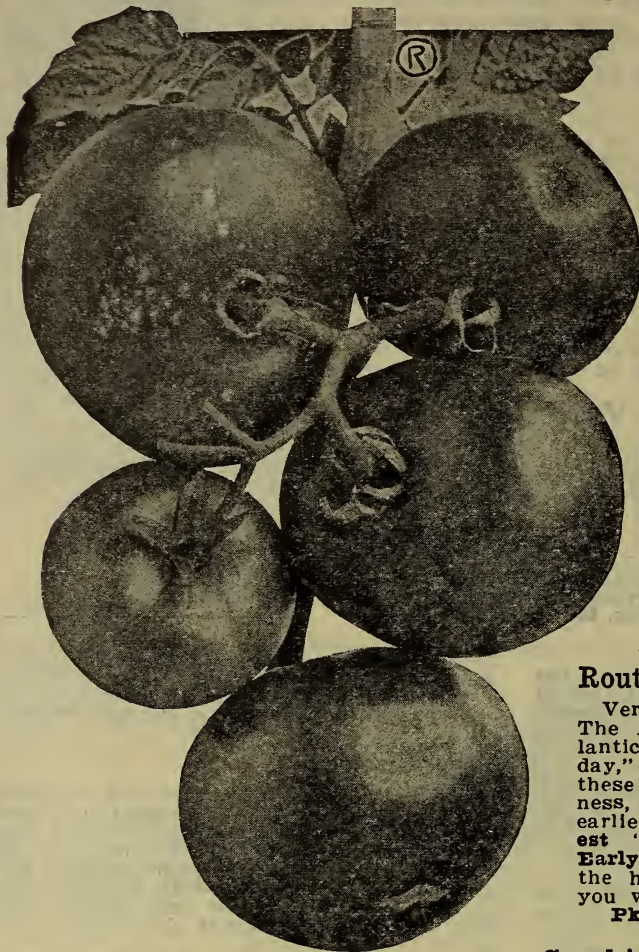
**True Hubbard.**—Note the thickness of the flesh.

**DOUBLE** the yield of your squash by using a handful of "WONDER" Fertilizer to each hill. (See page 36.) You know the richer your ground, the larger the yield, and Wonder Fertilizer certainly contains more plant food than any other brand.



## TOMATO

Tomato Plants in any quantity. See Vegetable Plant list, page 33.



### Comet

The Best Tomato for Greenhouse Forcing.—A recent variety, matchless in form and color. Beautiful, smooth, round fruit in great abundance. Color a rich scarlet red. Sets very freely in bunches. Equally good for outdoor culture as for forcing.

Pkt. 15c; ½ oz. 40c; oz. 75c

### Chalk's Early Jewel

The largest, smoothest and finest flavored, extra early bright red tomato, about 10 days later than Spark's Earliana. It is a heavy cropper with tomatoes of larger size, sweeter flavor, produced throughout the season. The plants are of bushy, compact growth, heavily loaded with fruit. The tomatoes are just right for market; very solid and deep through, being almost round; ripening to the stem without cracks or green core. The flesh is thick, solid, of fine flavor, with few seeds.

Pkt. 10c; oz. 80c; 4 oz. 90c

### Routledge's Early Oregon

Very hardy and succeeds everywhere. The Early Michigan, Fordhook and Atlantic Prize were good sorts "in their day," but the Early Oregon is superior to these in shapeliness, color, size, smoothness, solidity and flavor, as well as being earlier. Those wishing to have the earliest "GOOD" tomato should raise our Early Oregon. Highly recommended for the home or market gardener. Try it; you will not be disappointed.

Pkt. 10c; ½ oz. 20c; oz. 30c; 4 oz. \$1.00

### Spark's Earliana

The earliest tall variety, forming ripe fruit much earlier than most early varieties. The fruit is large, smooth, of a bright scarlet color and of fine quality. Very valuable for early market use.

Pkt. 10c; oz. 35c; 4 oz. \$1.00

### STONE

Grown very extensively for a main crop by market gardeners; very large, smooth and solid, of a bright red color and a heavy yielder; of excellent quality and not subject to rot.

Pkt. 5c; oz. 25c; 4 oz. 75c

**DWARF CHAMPION.**—Forms a strong, erect, bushy plant 2 feet high; often sold as Tree Tomato. Fruit smooth, medium sized, solid and of good flavor.

Pkt. 5c; oz. 30c; 4 oz. \$1.00

**YELLOW OR RED PEAR.**—Used for preserves and to make "tomato figs." Fruit distinctly pear shaped and of excellent flavor.

Pkt. 5c; oz. 30c

**RED OR YELLOW CHERRY.**—Fruit small, about ½-inch in diameter; perfectly round and smooth; fine for pickles and preserves.

Pkt. 5c; oz. 30c

### Bonny Best

Highly prized by many Oregon growers. Tomatoes large, smooth and of a rich scarlet red, the color that sells quickly. Fruit thick with a small core, a profitable tomato for any purpose. Slices exceptionally well. Flesh and flavor excellent. Nearly globe shaped, slightly flattened at stem. Borne in clusters of 5 or 6 fruits all ripening evenly together. Very productive and one of the very earliest.

Pkt. 10c; ½ oz. 25c; oz. 45c; 4 oz. \$1.25

**YELLOW HUSK OR GROUND CHERRY.**—used for preserves and eating from the hand. The seed we offer is that of the true Yellow Ground Cherry, not the purple-fruited sort, which is scarcely edible.

Pkt. 5c; oz. 30c

## TOBACCO

Culture practically same as cabbage.

**Havana or Connecticut Seed Leaf.**—Both good, hardy varieties for general planting here.

Pkt. 10c; oz. 40c

Increase the yield and quality of your Tomatoes by using a good plant food. See page 36. **WONDER ODORLESS FERTILIZER** will do it; a spoonful to a plant.



## TURNIPS OF "Highest Quality"

For spring use sow very early in rich, loose ground. They must make a quick growth to be tender and sweet. For fall and winter use sow in July, August or early September.

### Extra Early WHITE MILAN TURNIP The Very Earliest

An excellent table turnip, and the earliest of all varieties; adapted for very early spring or fall planting. The tops are small; the bulbs of medium size, flattened, and ivory-white in color. The flesh is fine grained, tender, and of a mild, sweet flavor. It remains in good condition for a long period of time, and does not become pithy or stringy.

Pkt. 5c; oz. 15c; 4 oz. 45c; lb. \$1.50

### Orange Jelly, or Golden Ball

Delicate and sweet, yellow flesh, medium in size, firm, crisp and most excellent flavor; keeps well and is superior as a table variety.

Pkt. 5c; oz. 10c; 2 oz. 15c; 4 oz. 20c; lb. 65c

### Early White Flat Dutch

A leading white fleshed variety; either for the family, market garden or field crop; it is medium size and produces a large crop; the flesh is firm, but tender and of a superior rich, buttery flavor; a good keeper.

Pkt. 5c; oz. 10c; 2 oz. 15c; 4 oz. 20c; lb. 70c

### Early Snowball

A superior table variety, meltingly tender, with snow-white flesh. Matures six weeks after sowing; medium size, smooth and perfectly globular.

Pkt. 5c; oz. 10c; 2 oz. 15c; 4 oz. 25c; lb. 80c

### White Egg

Is perfectly smooth, of a pure clear white; a very choice kind for table use; of excellent flavor, sweet and mild; pulls clean from the ground; thin, snow-white skin. Egg shaped.

Pkt. 5c; oz. 10c; 2 oz. 15c; 4 oz. 20c; lb. 75c

### EXTRA EARLY PURPLE TOP MILAN.—

This variety is ready for the table almost as early as white Milan; flesh white, firm and delicate.

Pkt. 5c; oz. 15c; 4 oz. 45c; lb. \$1.40

### Early Purple Top (Strap Leaved)

One of the best and universally grown; flesh firm, but very tender and sweet; of quick growth; attains large size, profitable for stock, keeps well.

Pkt. 5c; oz. 10c; 2 oz. 15c; 4 oz. 20c; lb. 65c

**AMBER, OR YELLOW GLOBE.**—One of the best yellow-fleshed varieties; skin clear yellow; is of good size and fine flavor.

Pkt. 5c; oz. 10c; 2 oz. 15c; 4 oz. 20c; lb. 65c

**PURPLE TOP WHITE GLOBE.**—A very heavy cropping, globe-shaped variety, with white skin and flesh; excellent flavor and much in favor with the market gardeners.

Pkt. 5c; oz. 10c; 2 oz. 15c; 4 oz. 20c; lb. 65c

**YELLOW ABERDEEN.**—Round, medium size; light yellow; produces a large crop; is hardy and keeps well; flesh very firm, but tender and sweet; a great favorite with the dairymen for feeding cows.

Pkt. 5c; oz. 10c; 2 oz. 15c; 4 oz. 25c; lb. 75c

### Cowhorn (Long White)

Slightly crooked, pure white, except a little shade of green at the top; grows half out of the ground and is of very rapid growth. Has proved itself one of the best stock turnips ever introduced in Oregon.

Pkt. 5c; oz. 10c; 2 oz. 15c; 4 oz. 25c; lb. 75c

## NO MORE WORMY TURNIPS

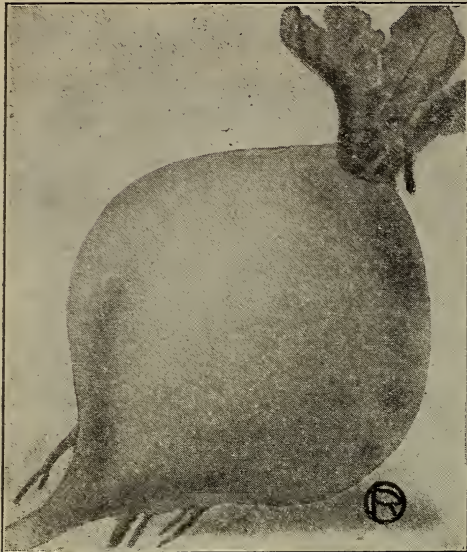
A new and wonderfully successful spray for destroying maggots, grubs and worms which infest Turnips, Radishes, Beets, Rutabagas, Cauliflower, Cabbage, Onions, etc., and also recommended for combatting crown borers in Strawberries.

A marked increase in yield of vegetables follows the use of "Carco" spray. See page 117. Special leaflet on request.



Extra Early White Milan Turnips.





American Purple Top.

RUTABAGA OR SWEDES

For feeding stock in fall and winter there is nothing superior to turnips and rutabagas, as they are much liked by all kinds of stock, and serve to keep them in good condition.

**IMPROVED AMERICAN PURPLE TOP.**—The leading and most popular variety, being very distinct in type, attaining a wonderfully large size; immense yielder; the flesh is very firm, cream yellow, fine grained, sweet and tender. Excellent both for table and stock feeding. Keep all winter.

Pkt. 5c; oz. 10c; 2 oz. 15c; 4 oz. 20c; lb. 65c

**WHITE SWEET GERMAN.**—This variety is most excellent either for table or stock; it grows to a very large size; flesh white, solid, of a firm texture, sweet and rich; an excellent keeper.

Pkt. 5c; oz. 10c; 2 oz. 15c; 4 oz. 20c; lb. 60c

HERB SEEDS

Pot, Sweet and Medicinal

Herbs in general delight in rich, mellow soil. Those marked with a (\*) are perennial. We offer some of the most useful and popular. They should be cut on a dry day, just before they come into full bloom, and tied in bunches and hung up or spread thinly on a floor where they can dry quickly.

All the Following Herbs, 5c per Packet.

|   | Oz.           | Oz. |
|---|---------------|-----|
| Anise.—Seeds aromatic; used medically.  | 20c           | 30c |
| *Balm.—For culinary purposes            | 25c           | 20c |
| Basil.—Sweet; for flavoring soups       | 20c           | 25c |
| Borage.—For flavoring; also bee pasture | 15c           | 25c |
| Caraway.—For flavoring                  | 15c           | 35c |
| *Catnip (Cat Mint).—Mild nervine        | 40c           | 15c |
| Coriander.—Used for flavoring           | 10c           | 20c |
| Dill.—Used medicinally and for pickles  | 10c           | 20c |
| Dandelion                               | Pkt. 10c; 75c | 45c |
| *Fennel.—Flavor of celery               | 10c           | 25c |
| *Horehound.—Bitter; for tonic           |               |     |
| *Hysop                                  |               |     |
| *Lavender.—For fragrance                |               |     |
| *Marjoram.—Sweet; for flavoring         |               |     |
| *Rosemary.—Aromatic oil                 |               |     |
| Summer Savory.—For flavoring            |               |     |
| *Sage.—For tea flavoring and dressings  |               |     |
| Saffron.—For dyeing and powder          |               |     |
| *Thyme (Broad-Leaved).—For soup         |               |     |
| *Wormwood.—Medicinal use                |               |     |

VEGETABLE PLANTS

We grow large quantities of choice vegetable plants, and can supply all of the varieties listed below, in their proper season, in most any quantity. We can supply all vegetable plants in two grades—plants direct from the seed beds and those that have been transplanted into shallow boxes. Transplanted plants are much stronger and better rooted, and are well worth the price, especially in the early part of the season. We can supply most any of the leading sorts. Tell us your choice of varieties, and we will send it or give good substitute. **NO PLANTS SENT C. O. D.**

|   | By Express                | By Express           |
|---|---------------------------|----------------------|
|   | Postpaid Not Prepaid      | Postpaid Not Prepaid |
|   | Dozen 100 1000            | Dozen 100 1000       |
| <b>CABBAGE AND KALE</b>   |                           |                      |
| Early kinds, transplanted   | \$ .20 \$ .75 \$6.00      |                      |
| Late, not transplanted  | ... .20 .50 4.00          |                      |
| Add 15c per 100 for Cabbage Plants by mail.   |                           |                      |
| <b>CAULIFLOWER</b>  |                           |                      |
| Early Snowball, transplanted  | .25 1.25 8.00             |                      |
| Early Snowball, not transplanted  | .25 1.00 7.00             |                      |
| Late kinds, transplanted  | .25 1.00 7.00             |                      |
| Late, not transplanted  | ... .25 .75 6.00          |                      |
| Add 15c per 100 for Cauliflower Plants by mail.   |                           |                      |
| <b>CELERY AND CELERIAC T. R.</b>  |                           |                      |
| Leading kinds, transplanted   | .25 1.00 7.00             |                      |
| Not transplanted  | ... .50 5.00              |                      |
| Add 15c per 100 for Celery Plants by Mail.  |                           |                      |
| <b>PEPPER AND BRUSSEL SPROUTS</b>   |                           |                      |
| Transplanted  | .....\$ .25 \$1.00 \$7.00 |                      |
| <b>SWEET POTATO PLANTS</b>  |                           |                      |
| Sweet Potato Plants   | ..... .30 1.00 7.50       |                      |
| <b>TOMATOES</b>   |                           |                      |
| Leading kinds, transplanted   | .30 1.00 7.00             |                      |
| Not transplanted  | ... .75 6.00              |                      |
| Add 25c per 100 for above plants by mail.   |                           |                      |
| Pot Grown Tomato Plants.—These large plants give the most profitable results. Can not be mailed. Prices: 2½-in pots, 10c each, \$1.00 doz.; 3-in. pots, 15c each, \$1.50 doz.; 4 to 5-in. pots, 25c each, \$2.50 doz.; must go by express, charges collect. |                           |                      |
| <b>Chives (Schnittlauch).—Per bunch, postpaid</b>   |                           |                      |
|   | .....25c                  |                      |



We Recommend and Sell

# Mulford Cultures

## FOR LEGUMES

(Note—This culture was cataloged last year as NITRO-GERM.)

Always inoculate seed (or soil) with the MULFORD NITRO-GERM CULTURE before planting Garden or Field Beans and Peas, Sweet Peas, Alfalfa, Clovers, Vetch and other field or garden legumes.

It means great increased crops and improved soil.

The MULFORD CULTURES contain nitrogen-fixing bacteria, which form nodules on the roots of field and garden legumes that act by collecting nitrogen from the air and converting it into nitrates—food for soil and plants. It puts more into the soil than the growing crops need and it won't leach out; enriches the soil for succeeding crops of all kinds. Government tests have proved this scientific method of immense value to farmers and truckers.

Failure to produce satisfactory crops of Clover, Alfalfa, Vetch, Peas, Beans and other legumes, is more often attributable to lack of the necessary bacteria in the soil than merely to poor soil.

When these germs are present in sufficient numbers, small nodules form on the roots of leguminous plants, as shown in accompanying cut, and the nodules store up the nitrogen which is drawn from the air by the plant.

Without these germs a good crop is impossible. Therefore always inoculate the seeds mentioned at planting time with the MULFORD CULTURES, which contain active nitrogen-fixing bacteria. The bacteria in this product have all been proved by actual test to be active and vigorous. It is easily and quickly used by mixing with water and applying to the seed or soil; the directions which accompany each package are so complete and explicit that anyone can use it.

**MULFORD CULTURES** are "DIFFERENT" and should not be confused with other brands.

The color is different (they are dark, almost black, due to a special ingredient added to increase the growth and activity of the bacteria).

The count is different (bacterial counts show fully twice as many bacteria as in the old-form cultures).

The bottle is different (being sealed—an important feature which prevents all possibility of contamination from the outside air).

### Increase Your Crops—Improve Your Soil

Legumes offer the best-known means of maintaining soil fertility and rejuvenating over-cropped and worn-out fields. They add both humus and nitrogen to your soil and thus increase your yield of non-legume crops.

The U. S. Department of Agriculture and many State Agricultural Experiment Stations recommend inoculation of legumes with nitrogen-fixing bacteria to induce a prompt "catch" and increase your yield.

**MULFORD CULTURES** are scientifically prepared and tested by experts, in the biological laboratories of H. K. Mulford Co., Philadelphia, with the same degree of care as Mulford Antitoxins, Serums, Vaccines, etc., which are standard all over the world.

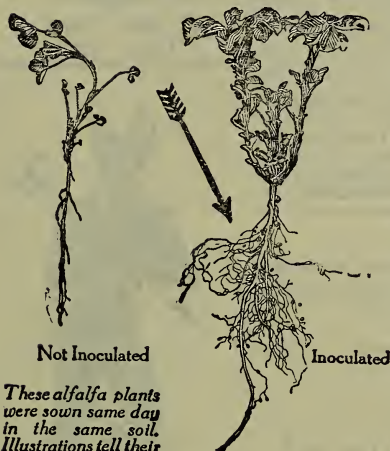
**CAUTION**—Be sure to specify the particular legume on which you desire to use the MULFORD CULTURES otherwise we will not know how to fill your order. We have it for Alfalfa, Red Clover, White Clover, Sweet Clover (Bokhara), Alsike Clover, Field Peas, Vetch, Garden Peas, Garden Beans, and Sweet Peas.

**PRICES**—Quarter acre size, 50c; 1 acre size, \$1.50; 5 acre size, \$500, postpaid. **TRIAL GARDEN SIZE ONLY**, Sweet Peas Garden Peas or aGarden Beans 25c, postpaid 30c.

The 5-acre size is not carried always in stock, and orders for that size should reach us at least ten days before it will be required for use.

Why buy expensive commercial nitrates when you can grow legume crops and thus increase your yield and at the same time increase the nitrates and enrich and renovate your soil by Nature's own method?

MULFORDS FREE DESCRIPTIVE LITERATURE SENT UPON REQUEST.



These alfalfa plants were sown same day in the same soil. Illustrations tell their own story.



# WONDER ODERLESS FERTILIZER

The best fertilizer for the city gardener; clean and odorless. Remember, it's **ALL FERTILIZER**; a wonder in action, a giant in strength, and the small amount necessary to use makes it the **CHEAPEST AND MOST EFFICIENT** High Grade Fertilizer on the market, and last, but not least, **IT IS ODORLESS**.

In "**WONDER**" you get the latest scientific discovery in plant food, something which gives results, something that astonishes. This "**WONDER**" fertilizer is the result of years of study and trials by a fertilizer expert. In "**WONDER**" we have a meritorious and **ODORLESS** concentrated fertilizer, put up in small packages, thereby making its distribution a cheap and easy matter. Being a concentrated fertilizer, only a very small amount is required to produce the largest yield. (See general directions below.) There's no use of your paying dray and freight charges on bulky fertilizers containing three-fourths sand, ash or dirt filler. "**WONDER**" is the pure "**DOPE**"—clean and easy to apply. We guarantee it to give results.

The small amount of "**WONDER**" required reduces the expense of fertilizing to about one-half the cost of manure or the average commercial fertilizers on the market.

The "**WONDER**" Fertilizer is sold only in 25-lb. white, clean canvas bags and 2-lb. odorless cartons.

## Price of "Wonder" Fertilizer

Two-lb. cans 30c. **ADD POSTAGE** if wanted by mail. 25-lb. white canvas bag, f. o. b. cars or boat Portland, or delivered free anywhere in this city or on any rural route within the first or second parcel post zone, \$2.00. **ADD POSTAGE** for points outside 2nd zone.

## General Directions for Using Wonder

Remember a 25-lb. bag of "**WONDER**" is equal, in plant food, to 100 lbs. of most any other commercial fertilizer on the market.

**For Ferns, Palms and House Plants:** One-half teaspoonful to a 6-in. pot, dug into the top soil; 1 teaspoonful, heaping, when repotting, mix well through the soil.

**For Vegetables:** A teaspoonful to a Cabbage, Tomato, Cucumber, Pumpkin or Melon Vine. Sprinkle lightly, in the row, when planting Radish, Lettuce, Peas, etc., or hoe in the top soil after they are up. **For Flowers outside:** A very little to each plant, or dig into the top soil before or after planting. 1 lb. to 10 foot square.

**For the Lawn:** One 25-lb. bag of "**WONDER**" will go over a space of your lawn 50x50 or 2500 square feet, and is sufficient for same, applied once yearly. In dry weather always water after applying.

**For Fruit, Roses, Etc.:** A heaping tablespoonful for a small Fruit, Berry, or Rose Bush, a cupful for a 3 or 4 yr. tree; 1 to 3 lbs. to a full-bearing Fruit Tree, large Flowering Shrub or Vine.

**CAUTION!** Always mix the fertilizer into the top soil as much as possible, and water or sprinkle after applying it, especially on grass or tender foliage or growth.

Ask for "**WONDER**" **20-PAGE BOOKLET** that gives plain facts and full information and directions for all purposes. **FREE.**

**NOTE.**—Two sacks "C. M." and 1 25 lb. sack "Wonder" (see opposite page) mixed together will make a very rich combination fertilizer, that will prove highly satisfactory for all uses—as it would be very rich in plant food and supply the necessary humus for heavy soils.

**FREE**  
20 pg. Book  
Tells All.



**Wonder Trade-Mark.**

## POTASH OUT OF SIGHT

We have never known potash to be so high in price and so scarce as it is now. Of course this is on account of the European War—the American supply has been coming from Germany.

We would be unable to sell "Wonder" at all this year, were it not for the large reserve stock and three year contract of the manufacturers. "Wonder" is so rich in potash that above prices must necessarily be advanced when present stock is gone, as the formula will not be cheapened. We think we have stock enough for this year.





## Kiln-Dried Pulverized Cow Manure

For Short call it "C. M."

Supplies the "Humus" lacking in chemical Fertilizers and the analysis shows it to be quite rich in nitrogen potash and phosphoric acid. It will not burn or harm the most tender seeds or plants.

This is a new product that we are having prepared for us and we believe there will be an enormous demand for it when gardeners and florists discover its great value.

This product is made of green cow manure by putting it through a dry-kiln with heat enough to evaporate the water and kill all weed seed without burning the compost or destroying the fertilizing elements. It is then ground finely and sacked.

**EIGHT TO ONE.**—You can get a good idea of the value of this concentrated product when we state, that it takes 8 to 10 tons, in the green or natural state, to make 1 ton ready to sack. If you stop and think a minute, you will realize that we are really offering, in a most convenient dry state, a

fertilizer and compost that heretofore you have bought by the wagon load, in a most dirty, foul and disagreeable form.

**SUPPLIES THE HUMUS.**—This new product supplies all the humus and fertilizing value of the old form, without the disagreeable odor, coarse straw, chaff and weed seeds to get scattered over the garden or lawn. In fact you get everything in an ideal form except the live weed seed and moisture. You do not want the weeds and can easily apply water when needed. There is no use of paying dray, freight or handling charges for dirty, foul, water soaked manure when this product can be had.

**CHEAPER AND MORE CONVENIENT.**—The old form cow manure costs about \$3.00 a load delivered and about \$3.00 more to get it placed and spaded under. Two sacks of our Dry-Kiln C. M., which is practically odorless and can be spread around by anyone at leisure, will cost less and give better results.

### Uses and Directions for "C. M."

#### FOR FLOWER BOXES OR REPOTTING

This Dry-Kiln Cow Manure will be found very valuable to mix with ordinary garden soil for repotting plants, filling window or porch boxes or the benches in the greenhouse, the top soil of cold frames, hot beds, etc. Use from one-fourth to one-third "C. M." according to the soil.

#### FOR SEED BEDS

As a top dressing over seed beds, where small flower or vegetable seeds are to be started, nothing else could be better, as it is full of "humus" (like leaf-mold) which keeps the top soil loose and open. Rake "C. M." into the top soil or after seeding, sprinkle "C. M." over the surface.

#### FOR VEGETABLES AND FLOWERS

Use "C. M." on any soil that needs loosening up and enriching. To raise choice vegetables and large beautiful flowers, the soil must be well worked, rich and loamy.

#### FOR LAWNS

"C. M." is just what has been wanted for years by amateur and professional lawn-makers. Heretofore on account of heavy soils that would bake and crack, the best cow manure obtainable was used to open up and keep the soil loose. It was not the plant food needed, as that could easily be applied in the form of Chemical Fertilizer, but it was the "humus" in the stable manure that was wanted, but NOW with this Dry-Kiln, weed free, "C. M." the lawn-maker's troubles are greatly reduced.

**HOW TO USE.**—After the lawn has been graded, raked, seeded and rolled, spread "C. M." broadcast over the seed, covering it well. If it is dry weather, sprinkle, but sprinkle lightly so as not to wash it off until it has settled, after it is once wet it becomes part of the surface soil and will remain.

**ANOTHER WAY.**—Providing you will use "C. M." in a liberal amount it would be better raked into the surface soil, then seed, rake lightly and roll.

#### PRICES OF DRY-KILN "C. M."

Large Sks., \$1.75; 3 Sks., \$5.00; 5 Sks., \$8.00; 10 Sks., \$15.00; small lots—2 Lbs., 15c; 5 Lbs., 25c; 10 Lbs., 40c; 25 Lbs. to 50 Lbs., 3c Lb.

### Up-to-Date Fertilizers of Merit

With our new fertilizer Dry-Kiln "C. M." to supply humus, and "Wonder" the strongest and richest odorless chemical fertilizer and "Ground Lime Rock" the great soil conditioner, we have a combination that will supply every need.

The day of strong smelling, odorous fertilizers is over, we believe, at least for the city and suburban gardener.

Tell us your soil condition and what you want to grow and let us help supply the right Fertilizer.

**For Liquid Manure.**—Empty half a sack of "C. M." into a 50 gal. barrel and fill with water. Use this liquid straight or diluted form, for watering. The increased vigor and growth of plants will almost immediately be noticed.



## Fertilizers—Continued

**NOTICE.**—Fertilizer prices subject to market changes. Write for quantity price.

### Sheep Guano—Pulverized

For Lawns and Garden Work.

We offer a really first class Sheep Manure that is pure and free from straw and dirt because it has been properly dried, then ground and sacked. You will find it pulverized, dry, almost odorless and very superior to most stocks.

Prices: 10 lbs. 25c; 50 lbs. \$1.25; 100-lb. bag \$1.75, delivery extra; low price per ton.

**HIGH-GRADE BONE MEAL.**—This is finely ground and of best quality. Used for Lawns, Roses, Shrubs and Trees. Not very quick in action and should be applied in the fall or very early spring. Use 1000 to 2000 lbs. per acre.

Price: 5 lbs. 30c; 10 lbs. 50c; 50 lbs. \$1.50; 100 lbs. \$2.50.

**GROUND LIME ROCK.**—Lime is an indirect soil improver and a very valuable conditioner. Loosens the soil and releases the plant foods. Few people realize its value. Most western Oregon soils need lime and our high grade ground Lime Rock is the most convenient form to apply it.

Price: 10 lbs. 50c; 50 lbs. \$1.00; 100 lbs. \$1.25. Low ton price on request.

**LAND PLASTER.**—Used largely on grass and clover crops. Not sold in less than 100-lb. sacks. City delivering extra.

Price: 100 lbs. \$1.00; 500 lbs. \$4.00; 1000 pound, \$7.50.

**NITRATE OF SODA.**—It is very quick in action, and hastens maturity of crops. Being quickly soluble, it should not be applied until the plants are above ground. Be careful or it will burn tender foliage.

Price: Lb. 10c; 5 lbs. 40c; 25 lbs. \$1.25; 100 lbs., prices on request.

## Kirk System of Fertilizing and Spraying

The **KIRKE SYSTEM**, is an Ingenious, Scientific Method of combining in one operation the several others formerly attendant upon fertilizers and insecticides for Lawns, Gardens, Shrubbery and Foliage.

A simple but clean, odorless, positively active, easily handled, practicable, economical, and efficient method of destroying Insects or Fertilizing requiring no additional labor or experience.

It abolishes the use of unsanitary stable manure, so objectionable, because of its disagreeable odors and the great abundance of weedseeds it contains.

It abolishes the use of cumbersome hand-pumps, hand sprayers, carts and wagons, etc., for distributing Insecticides and Fertilizers.

It is without an experimental feature—it will work as well for you as for the thousands all over the country who already enjoy its benefits.

It brings Maximum Efficiency with a saving to you of time, labor and money.

See cut page 39—Fertilizing the "Kirk way."



Using Fertilizer Tablet in Sprinkling Can.

### THE KIRKE FEEDER

Consists of a cylindrical nickel-plated metal cartridge holder, which is easily connected to any standard size water faucet or hose nozzle, and in which is placed a KIRKE Fertilizer, Insecticide or Fungicide cartridge.

It is a neat device and will last a lifetime. It is simplicity itself, and even a child can handle it. Price \$3.00 prepaid.

### KIRKE CARTRIDGES

To be placed in the **Kirke Feeder**. They are composed of the highest grade of concentrated and extremely active chemicals, and dissolve gradually with even and positive distribution.

### KIRKE FERTILIZER TABLETS

#### Sprinkling-Can Plant Food

For house plants in pots, porch boxes; flowers or vegetable gardens or grass plots, that are watered by hand.

One tablet is enough for eight gallons of water. Can be dissolved in a stronger solution and then diluted when used.

This fertilizer promotes and sustains vigorous healthy luxuriant growth and abundant and richly colored flowers and grass.

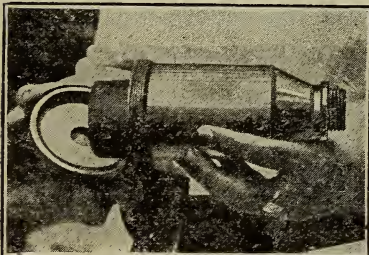
Price per box of 12 tablets, 40c; postpaid, 6 boxes, \$2.00.

### PRICE LIST OF KIRKE CARTRIDGES.

Each

Prices subject to market prices of chemicals.

|  |        |
|--|--------|
| <b>Fertilizer Cartridges</b> —For garden and lawn.....   | \$ .35 |
| <b>Tobacco</b> (Nicotine and soap)—For all sucking insects   | .35    |
| <b>Arsenate of Lead</b> —For all leaf eating insects.....  | .45    |
| <b>Bordeaux</b> (Fungicide)—For mildew, blight, rust, etc.   | .35    |
| <b>Angle Worm, Red or Black Ant Destroyer</b> —For Tennis Courts, Lawns, Golf Links, etc. ....             | 1.25   |
| <b>Sulphur Compound</b> —Insecticide and Fungicide Spray.  | .35    |
| <b>Fly-Maggot Compound</b> —Disinfectant and Germicide for stables, kennels, coops, pens, workshops, etc.. | .35    |



The Kirk Feeder Showing Cap Off and Cartridge Inserted.

**NOTE.**—Above prices are NOT POSTPAID—Add 5c per cartridge, or 25c per dozen, if wanted by mail. Dozen price is 10 times the each price. Prices subject to changes in Chemical Market.

"KIRKE SYSTEM" once used, always used. "Kirke System" received a special award at both the Philadelphia and New York Flower Shows. DESCRIPTIVE CATALOG ON REQUEST.





Fertilizing by the Kirke System in Prospect Park, Brooklyn, N. Y. See opposite page.

## LAWN GRASS SEED

Though we offer separately, seed of many of the grasses suitable for the lawn, we consider as very erroneous the somewhat prevalent idea that any single variety of grass seed is preferable or equal to a mixture.

### R. R.'s Evergreen Lawn Grass

To obtain a good Lawn Grass Mixture, it is necessary that the best possible seed of fine grasses be used in the combination, embracing such varieties as are of neat, close growth, extreme hardiness, and adapted to produce a quick, permanent sod. Judicious selection of seed, knowledge of the habits, vigor, quality and hardiness of varieties used in the mixture can only be gained by thorough and practical tests under different climatic and soil conditions. After many years' experience, we offer our pure, clean Evergreen Lawn Grass Seed Mixture, composed of a thoroughly balanced combination of various native and foreign fine-leaved, deep-rooting grasses of interweaving habit, that will flourish under varied soil and climatic conditions, and which may be depended upon to produce a beautiful, compact evergreen sod that will resist tramping and hard usage, and at the same time present that handsome, velvety appearance so much desired.

**PRICE, 40c per lb. postpaid. 10 lbs. or more NOT PREPAID, at 35c lb.**

**Note.**—You better spend a few cents or a dollar extra on the seed you buy and have a fine lawn that you'll be proud of. Sow 1 pound seed to 15 feet square for best results.

### Seeds for Lawns and Special Mixtures

**SEED.**—There is as much difference between clean, high grade grass and clover seeds for lawn making and the common or ordinary grass seeds as there is between high grade white flour and bran. You would not think of trying to make light, white bread of bran, neither should you expect to make a fine green, velvety lawn from low grade, light weight, immature and foul grass seeds. **Weight purity and germination** is what sets the price of grass and clover seeds. We buy and use the **highest grade, pure tested seeds** for our Evergreen Lawn Grass Mixture. Of course, they cost more, but we know from experience that they give best results and are the **only kind** of seeds that it pays to use if you want a beautiful lawn. Do not buy low priced Lawn Grass Mixtures and expect good results. **NO ONE** gives you anything better than you pay for.

**SPECIAL MIXTURES.**—For all round general conditions, our Evergreen Mixture is unexcelled, but we will prepare special mixtures for shady places, low, wet soils, very dry soils and terraces. Just mention it when ordering.

**WHITE CLOVER.**—Many gardeners like white clover mixed in lawn seeds and it is excellent, especially if your soil is heavy or poor. White clover grows quickly and acts as a nurse crop and protects the fine leaved grasses. Evergreen Lawn Grass with one-fourth white clover is 10c per pound more.

### FAIR GREEN LAWN GRASS

For those that are not so particular, or for ordinary purposes, this mixture will give satisfaction. It is not a cheap mixture; far from it. We know it is equal to most fancy or special mixtures being offered.

Per lb. 30c; postage extra; 10 lbs. or more, not prepaid, at 25c lb.

### Feed the Lawn

Do not starve the grass if you want it to look green and velvety; use "Wonder" and "C-M," as per directions. See pages 36 and 37.

For Lawn Rollers, Lawn Mowers, Lawn Supplies, Etc., See Pages 112 to 118.



## ALFALFA AND CLOVER SEEDS

Single pound\*prices on Grass Seed are prepaid. Ten, fifty and one hundred pound prices are NOT prepaid and subject to change. See notes page 41. For amount of seed to sow per acre see table inside back cover.

### White Clover (*Trifolium Repens*)

Used largely in lawns and permanent pasture mixtures. Accommodates itself to a great variety of soils. High grade clean seed is very scarce and high this year; beware of low-priced seed this season.

Choice Seed, 10 lbs. \$6.00. Per lb., postpaid, 65c.

Extra Fancy Seed.—Per lb., postpaid, 75c

For Lawns always buy our Extra Fancy Seed, which is the purest high quality seed obtainable, and the true very dwarf, hardy variety.

It Pays Well to inoculate Alfalfa and Clover Seeds with Mulford's Cultures. See page 36.

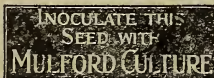
### Red Clover (*Trifolium Pratense*)

Hardy, and succeeds well on any good soil. 10 lbs. \$2.25; 100 lbs. \$21.50. Per lb., postpaid, 35c.

### Alsike Clover (*Trifolium Hybridum*)

Valued highly for sowing with other grasses. Excellent for hay and pasture; valuable for bees; resists both drought and excessive moisture.

10 lbs. \$2.25; 100 lbs. \$21.00. Per lb., postpaid, 35c.



The MULFORD CULTURES contain nitrogen-fixing bacteria, which form nodules on the roots of field and garden legumes that act by collecting nitrogen from the air and converting it into nitrates—food for soil and plants. Get wise by reading page 35.



### Sweet Clover (*Melilotus*)

Sweet clover has come to stay. There is no doubt about it. Ask any farm paper, any state college, the U. S. Department, or better yet, any man who has grown it.

Sweet clover is used as either a feed crop or as a fertilizer to plow under to improve the soil and increase the crop to follow. It grows fast and is easy to start.

Grows luxuriantly on good soils but it will also grow and thrive on thin, sandy soil, hardpan, gumbo, rocky upland, clay and alkali land.

Sweet clover lives two years. It makes large, rapid growth the first season and can be cut for hay or pastured the last half of the summer, but does not bloom or bear seed. The second year it blooms, bears seeds and dies. Will make two crops of hay or a crop of hay and one of seed the second year. Can be plowed under either the first or second year, but to get the full value in humus the second season is better on account of the large roots that penetrates the lower layers of soil thereby loosening it up and adding much humus and more nitrogen.

Sown very early in the spring. It does well sown either alone or with a nurse crop of small grain. Use 15 to 20 pounds of seed per acre.

Sweet Clover makes excellent pasture for horses, cattle, sheep, hogs or chickens. A very early and continuous cropper. Descriptive pamphlet on request.

Price: Per lb., 35c postpaid; 10 lbs., \$2.50; trial pkg. 10c. Write for quantity price.

### Double Your Clover Crop

By treating all clover seeds you plant with Mulford's Culture. BEST BY TEST. See page 35.

### Alfalfa, or Lucerne Clover

Reports prove that Alfalfa will grow in all parts of the West, but requires a deep loose soil. Will not thrive on heavy clay or where there is hard pan. As soon as cut it immediately commences to grow. Excellent hay or pasture. Alfalfa, once established, is a crop so profitable that every farmer may well take great care to get a stand. Much has been published about its high feeding, fertilizing and wonderful yield possibilities.

Price: 10 lbs. \$2.25; 100 lbs. \$21.00. Per lb., postpaid, 35c.

### Dry Land Alfalfa

For high, dry, hot land, where irrigation is impossible.

Price: 10 lbs. \$2.50; 100 lbs. \$22.00. Per lbs., postpaid, 35c.

### Crimson Clover (*Trifolium Incarnatum*)

A thrifty annual. It germinates quickly, grows rapidly and stools abundantly.

10 lbs. \$2.00. Per lb., postpaid, 30c

For Best Results Treat All Clover Seeds with Mulford's Cultures (See Page 35)





# GRASS AND FIELD SEEDS

## ABOUT PRICES

## READ THE FOLLOWING

## ABOUT PRICES

Only one grade priced, the best, choice, clean seed. Write for prices in quantity.  
Single pound prices on Grass and Clover Seeds are prepaid. Prices per ten, fifty and one hundred pounds are not prepaid and are subject to market changes. Reference tables inside back cover.

### YOU WILL ALWAYS GET YOUR MONEY'S WORTH.

Prices on Grass and Field Seeds change occasionally, therefore we cannot print prices good for any length of time. When ready to buy, write us for special prices, stating quantity wanted, or order what you want at catalog prices, and we guarantee that we will give you full value for the money sent, whether the price at the time you order be higher or lower. In other words, we will always ship seed to cover the full amount of money sent to us.

FOR AMOUNT TO SOW PER ACRE, SEE TABLE PAGE 144.

## SUDAN GRASS

### A New Forage and Hay Crop—A Valuable One-Season Crop

This grass was introduced in the States by the Department of Agriculture and has proved a great success especially for dry land conditions, and from many reports and observation and samples of the grass shown it appears to do equally well in all parts of the Willamette Valley.

**Sudan Grass is strictly an annual** and dies each year like Millet and must be seeded again each spring. This makes it fit admirably into any system of rotation, and while it does not benefit the soil like legumes, it does afford a change in crop and this is a good thing for the soil. Sudan Grass is tall, reaching a height of from seven to nine feet. The plant stools wonderfully and produces under favorable conditions as many as 100 stalks from a single root.

It belongs to the sorghum family, but is more slender and grassy in manner of growth, earlier and hardier, and matures in 10 to 12 weeks. Yields a good crop of first-class hay. All stock relish the hay and thrive on it. The quality is said to be equal to Timothy. Yields of from two to four tons per acre are common and under irrigation they run as high as eight to ten tons per acre.

**Seeding.** Do not plant until the soil has become warm in the spring or any time during the summer as a catch crop so long as 70 to 80 days intervene before frosts. Sudan Grass can be sown in rows 18 to 42 inches apart, drilled in with a grain drill or sown broadcast. In the semi-arid sections it is much more profitable to seed it in rows and cultivate, and even in the humid regions a small amount of cultivation appears to give added vigor to the plants. Seeded in rows 36 inches apart, 3 pounds per acre, drilled or broadcast 16 to 24 pounds per acre.

**Harvesting.** Sudan Grass is easy to cut with a mower and cures readily. When cut for hay it is best to cut just after full bloom, so that it will have as much time as possible for a second growth. After cutting it renews its growth promptly when moisture conditions are favorable. The grass stools abundantly after first cutting and the second and third cuttings are very fine stemmed.

Every farmer looking for a new forage or hay crop should try at least an acre or two. Beware of cheap, inferior seed.

**Prices Select, Tested Seed:** 10 lbs. \$3.50; per lb. 40c postpaid. Write for quantity price.

### Kentucky Blue (*Poa Pratensis*)

Remarkable for its ability to adapt itself to a great variety of soils, succeeding on an average dry soil as well as on a moist meadow. An abundant yielder and presents a handsome green appearance early in the spring, thus making it of great value for lawn mixtures. Our extra fancy grade for lawns is unequaled.

**H. Q. extra fancy,** 10 lbs. \$3.00. Per lb., postpaid, 35c.

**Fancy,** 10 lbs. \$2.00. Per lb., postpaid, 30c.

**NOTE.**—Our H. Q. (highest quality) Extra Fancy seed is unexcelled for weight and purity. Few dealers handle this high grade recleaned seed on account of its cost. This seed, straight or mixed with Fancy White Clover is excellent for lawns.

### English Rye Grass (*Lolium Perenne*)

A strong-growing, hardy perennial grass, noted for its nutritive qualities. It is equally valuable for both grazing and hay. It grows very rapidly and makes a good showing in a few weeks.

**For Lawns** this is used and recommended by many gardeners. If sown thickly, it makes a good hardy lawn, and for large grounds and parks it is very successful. Often mixed with White Clover.

10 lbs. \$1.50; 100 lbs. \$11.00. Per lb., postpaid, 25c.

### Creeping Bent (*Agrostis Stolonifera*)

Perennial. A grass desirable for either lawns or permanent pastures on account of the fine, firm and enduring turf it produces; especially adapted to moist situations.

Per lb., postpaid, 70c

**NOTE.**—We know you can buy cheaper Grass Seeds from other dealers. We offer only the **BEST RECLEANED HEAVY CLEAN SEEDS**—really cheapest to buy.



## Grass Seeds—Continued

### Orchard (*Dactylis Glomerata*)

Of the greatest value in permanent pasture mixtures; thrives best in moist, shady places, but will withstand drought exceedingly well. Valued for hay crop, as it is very nutritious if cut early. Its inclination to grow in tufts necessitates other grasses being sown with it.

10 lbs. \$2.50; 100 lbs. \$24.00. Per lb., postpaid, 35c.

### Red Top (*Agrostis Vulgaris*)

Of great value for mixing with hay or permanent pasture grasses; will succeed in nearly any soil, but thrives best in a rich, moist soil; makes a fine bottom growth, rendering it invaluable to be sown with grasses, such as timothy and orchard.

Choice Seed, not hulled, 10 lbs. \$1.50; 100 lbs. \$14.00. Per lb., postpaid, 25c.

Fancy Hulled Seed, 10 lbs. \$2.00; 100 lbs. \$18.50. Per lb., postpaid, 30c.

### Mesquite (*Holcus Lanatus*)

It is usually sown on virgin soil, without cultivation, after the ground has been burned over.

Fancy Hulled Seed, 10 lbs. \$2.00; 100 lbs. write. Per lb., postpaid, 30c.

### Italian Rye (*Lolium Italicum*)

A quick-growing grass, attaining a height of 2½ to 4 feet; very desirable for meadows or permanent pastures; thrives best on soils that are slightly moist, and will even stand considerable overflow; grows easily and bears an abundance of foliage that makes the best and sweetest hay imaginable.

10 lbs. \$1.50; 100 lbs. \$12.50. Per lb., postpaid, 25c.

### Timothy, (*Phleum Pratense*)

As a hay crop, timothy is unsurpassed by any other grass. Thrives on ordinary soil, but succeeds best in a moist loam. Best to cut it when in blossom or soon after flowering. Beneficial to sow timothy with red top and red clover, as they produce more of a bottom growth.

10 lbs. \$1.25; 100 lbs. \$10.50. Per lb., postpaid, 20c.

### Bromus Inermis (Brome Grass)

On account of its strong perennial character, and its unusual drought-resisting powers, is the best grass we have for the semi-arid regions of the Northwest. It grows luxuriantly, is freely eaten in either the dry or green state by cattle, and yields enormously, making the best of hay for horses or cattle.

10 lbs. \$2.00. Per lb., postpaid, 30c.

### Crested Dog's Tail (*Cynosurus Cristatus*)

A perennial grass, forming a smooth and lasting turf, excellent in mixtures for lawns, putting-greens, and pastures. It thrives best on rich, moist land, but can accommodate itself to almost any soil, and, as the roots penetrate deeply into the ground, it can stand severe drought.

10 lbs. \$4.00. Per lb., postpaid, 50c.

### Rhode Island Bent (*Agrostis Canina*)

Forms a very fine turf even on light soils; desirable for lawns, as it forms a very close sward.

Per lb. postpaid, 65c.

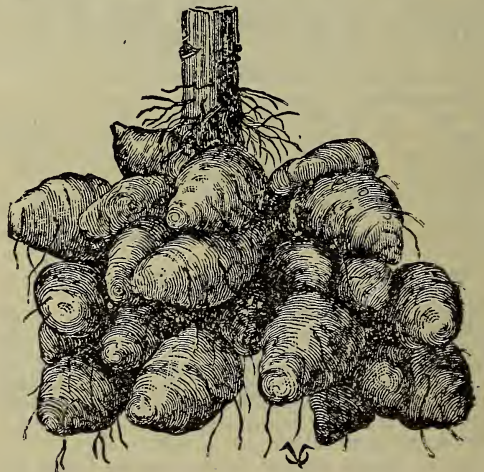
## FIELD AND FARM SEEDS

Single pound prices are prepaid. Ten, fifty and one hundred pound prices are NOT prepaid and subject to market changes. Seed to cover amount remitted always sent unless otherwise ordered. See notes page 41. Write for prices on larger quantities when ready to buy.

### White Jerusalem Artichokes

Planted and cultivated for the tuber, the same as potatoes. Of great value for feeding stock. They are the best and cheapest hog feed known. They are remarkable for great productiveness, over 25 tons have been raised on 1 acre. Easier to grow than potatoes. They need not be dug. If hogs are turned in on them they can easily root the tubers out. One acre will keep from twenty to thirty hogs in fine condition for several months. Said to be a preventive of cholera and other hog diseases. Excellent for fattening if fed with a grain ration. Plant 400 lbs. per acre early in the spring.

By freight or express, 10 lbs. 40c; 50 lbs. \$1.25; 100 lbs. \$2.00. Per lb., prepaid, 15c; 4 lbs. 50c. Write for quantity price.



Artichoke Tubers.

**VALUABLE BOOKS.**—On pages 122 and 123 we offer an up-to-date list of valuable books.

**You Need One** DAD'S NEW ELECTRIC LIGHT is something that will be of great service to our city, suburban and country customers. It's an all-around light, lantern or flashlight, in fact, it's "THE LIGHT OF ALL LIGHTS"—makes "NIGHT TIME A BRIGHT TIME." It takes the place of ALL open flame, gas or oil explosive lights for ALL PEOPLE and ALL PURPOSES. It is always ready. See page 121.



### Barley

**BEARDLESS.**—The earliest barley known. The straw is about the height of the common barley, but better, and will stand up on any land; with good season, land has produced 80 bushels per acre. Sow as early as you can; frost does not hurt it. This, as its name implies, is beardless, and as easy to grow and handle as oats. It is becoming more popular each season.

10 lbs. 40c; 100 lbs., write. Per lb., post-paid, 15c.

**WHITE HULLESS (Bald Barley).**—A grand barley for stock feeding. Grain plump, heavy, and when threshed is hullless like wheat; a heavy cropper. When grown and cut for hay it produces a magnificent crop, which is very rich and almost equal to a grain feed. Much relished by horses and stock of all kinds. An excellent hog feed. Culture same as common barley.

10 lbs. 50c; 100 lbs., write. Per lb., post-paid, 15c.

**COMMON BARLEY.**—We always aim to have a nice, clean stock of good Seed Barley on hand at all times.

10 lbs. 35c; 100 lbs., write. Per lb., post-paid, 15c.

### Buckwheat

**SILVER HULL.**—A very good and popular variety; grain is of a light gray color; has a thin husk; matures early, and yields heavily; a good milling variety.

10 lbs. 75c; 100 lbs., write. Per lb., post-paid, 20c.

**JAPANESE.**—Good yielder, ripens early; excellent for bee to work on as it remains in bloom longer.

10 lbs. 75c; 100 lbs., write. Per lb., post-paid, 20c.

### Cheat Seed

Cheat seed yields a good crop of hay, especially on low or moist soil, and will stand considerable overflow without harm. Sow in the fall or early spring, the same as oats and about 100 pounds per acre.

10 lbs. 50c; 100 lbs., write. Per lb., post-paid, 15c.



### Cow Peas

Are really small beans of vigorous habit and heavy foliage of great nutritious value, yielding five to nine tons of green feed per acre, or can be cut and cured like clover. They are great nitrogen gatherers and one of the best fertilizers when turned under. Sow two bushels per acre.

**WHIP-POOR-WILL.**—Upright or bush growth, earlier maturing, easily harvested.

**CLAY.**—Of vigorous growth. Excellent for ensilage; can be planted in hills with corn.

10 lbs. \$1.00; 100 lbs., write. Per lb., post-paid, 20c.

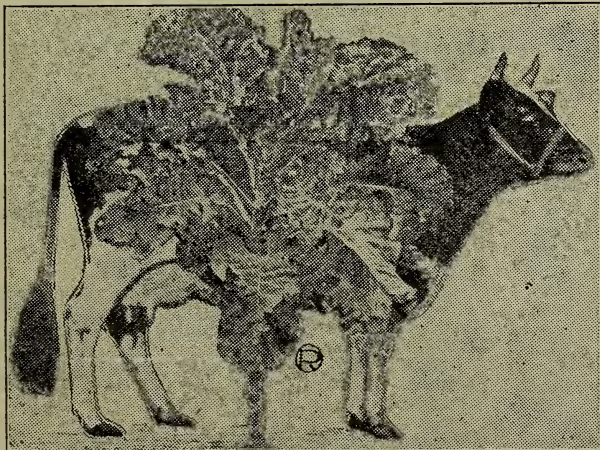
### Thousand-Headed Kale

Commonly Called COW KALE

Recommended by agricultural colleges, granges and dairymen as one of the most valuable green forage plants for the Pacific Coast.

It grows rapidly and produces a mass of large, thick, curly green leaves, rich and succulent, which are eagerly eaten by stock and poultry. If planted early will produce valuable green feed during the dry summer months. Makes the most rapid growth if sown in the early spring, but locally it is extensively planted in summer and fall for winter feed. Will stand light freezing. Stalks can be cut off, or the larger lower leaves broken off, leaving the tops to grow. Under good cultivation plants will grow from 5 to 6 feet high. Sow 2 to 3 lbs. per acre, thinly in drills 2 to 4 ft. apart and thin out. For late planting (July and August) it is better to have strong plants from earlier seeding and set out same as cabbage, 2 ft. apart, in rows. Thin out later if plants attain extra large size.

Pkt. 5c; oz. 10c; 4 ozs. 20c; 1b. 50c, postpaid.

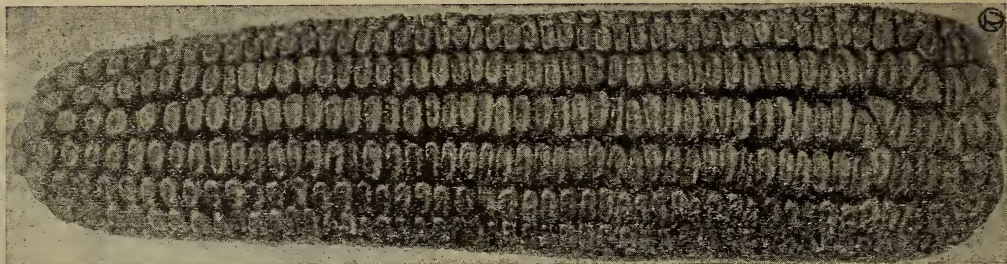


Thousand-Headed Kale.

This cut is from photo, and gives you a good idea of the size and plant when well grown.

**ROOTS AND CORN.**—Progressive farmers always provide full cellars of Carrots, Sugar Beets, Mangels and Swede Turnips—and we believe it is in the best interest of every farmer to grow plenty of Field Roots in addition to a liberal acreage of Corn for his live stock. These greatly reduce the grain and hay consumed, and keep the stock in excellent health.





Routledge Pride of the West.

## FIELD CORN FOR OREGON

If you want to raise some good Field Corn, plant our Western grown Seed Corn. The strains we are offering you are acclimated and especially adapted to our short, cool summers. Eastern and Southern grown field corn seed is all right for green fodder, but of little value on this Coast, if you want to raise matured, dry ears.

### Routledge Pride of the West

(Sample Ears on Display at Our Store.)

Oregon grown; acclimated. A grand success in Oregon. We have been raising this variety for years, and by selecting the earliest ripening and best select ears, now have a strain that is a revelation to many people who have thought Oregon and Washington could not raise profitable field corn.

**Routledge Pride of the West Field Corn** is an early maturing variety, producing stalks from 6 to 8 and 10 feet high, and large ears, 8 and 9 inches long. Cobs covered with 14 to 16 rows of deep, yellow kernels. It is a heavy yielder. Our strain has been greatly improved in the last 2 years. Plant some of this corn this season; you will be pleased with results, we are sure.

**Better Than Ever.**—Last season in spite of the late backward spring and unfavorable growing season our grower harvested **85 bushels per acre**, and had it all gathered before the unusually early and severe frost that ruined the most of the field corn in the valley for seed.

We claim this is the **earliest and heaviest yielding strain** of Yellow Dent corn grown in Oregon. Try it and be convinced.

**Large pkt. 10c; 1b. 20c, postpaid. Not postpaid, 10 lbs. 80c; 100 lbs., write.**

### Longfellow Extra Early

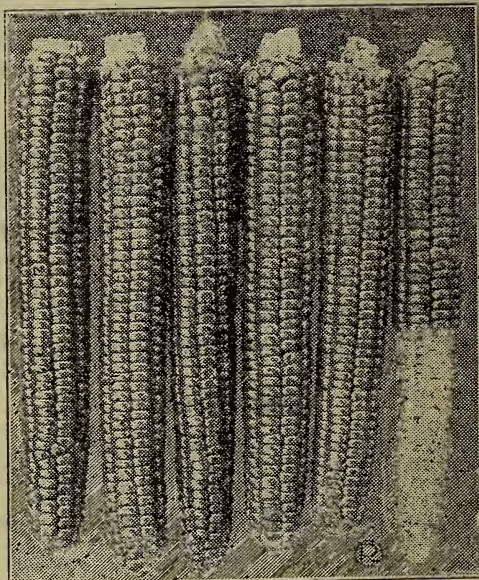
**Unsurpassed for Early Mature Ears and Production.**

This valuable corn is a flint variety, Oregon grown and thoroughly acclimated. Has been grown near Portland for the past five years with great success.

We believe this is hardier, earlier, and will grow under more adverse conditions than most any other kind. We recommend Longfellow to all growers who have not had success with the Yellow Dent varieties and for sections with a short season and cool nights.

**LONGFELLOW FLINT.**—The ears are 8 rowed, from 10 to 15 inches long and  $1\frac{1}{2}$  to  $1\frac{3}{4}$  inches in diameter. The cob is very small, kernels large, broad, glossy, deep yellow and very rich in food value. Stalks 5 to 7 feet high. Fifty lbs. of corn on the ears will shell 40 lbs. of corn, leaving only 10 lbs. of cob, showing that the grain yield is equal, if not greater than the large eared kinds.

**Per large pkt. 10c; 1b. 20c, postpaid. Not prepaid, 5 lbs. 50c; 10 lbs. 85c; 100 lbs. Write. Corn on the ear 15c each, 2 for 25c, postage 5c extra.**



Longfellow Extra Early Flint

### MINNESOTA NO. 13—YELLOW DENT

Well and favorably known in many sections of the West. Produces splendid large ears with deep kernels of bright yellow. A strong and vigorous grower with heavy foliage. A good fodder corn.

**Oregon Grown.**—Large pkt. 10c; 1b. 20c; 3 lbs. 50c, postpaid. Not prepaid, 10 lbs. 75c; 100 lbs. \$6.50.

### HARTMAN YELLOW DENT

A variety much advertised and claimed to be very early, productive and profitable. Has given excellent results in some sections—true stock.

**Large pkt. 10c; 1b. 20c, postpaid. Not prepaid, 1b. 15c; 5 lbs. 50c; 10 lbs. 75c; 100 lbs. \$6.50.**

### EVERGREEN SWEET FODDER

As all varieties of sweet corn possess very much more "sugar" than any field sort, it has the greatest net value. Evergreen Sweet Fodder makes luxuriant foliage and well formed, but not matured ears, excellent for feeding green.

**Large pkt. 10c; 1b. 20c, postpaid. Not prepaid, 1b. 15c; 10 lbs., \$1.00; 100 lbs., write.**

**OUR OREGON GROWN ACCLIMATED FIELD CORN WILL PLEASE YOU.**



## Field Peas

Field Peas are a very profitable crop and are grown here very extensively. They can be grown alone or with oats. When planted with oats and cut green they make a large amount of very rich feed; also very valuable for enriching the soil if plowed under. The dry peas make excellent hog feed and are quite fattening. Sow, if alone, 2 bushels to the acre; if with oats  $1\frac{1}{2}$  bushels peas and 2 bushels oats.

**WHITE CANADIAN.**—The leading and most popular kind; seed creamy white; a heavy cropper. Yields 30 to 50 bushels per acre.

10 lbs. 75c; 100 lbs., write. Per lb., postpaid, 20c

**BLUE PRUSSIAN.**—Valuable variety, seed green. Used extensively as a dry soup pea.

10 lbs. 80c; 100 lbs., write. Per lb., postpaid, 20c

### INSURE YOUR PEA CROP

Why not be sure of a large heavy crop of peas by inoculating the seed with "Mulford's Cultures?" (See page 35.)

A United States Department of Agriculture Bulletin says:

"It is worse than useless to attempt to grow any leguminous crop without being certain of the presence of the bacteria, which enable the plants to fix free nitrogen. Certain regions are practically devoid of the right kind of bacteria, and unless some artificial means of inoculating with the germ is resorted to, the crop will be a failure." Use Mulford's Culture, page 36.

# SEED OATS

## Routledge Prize Oats

This wonderful new Oat, introduced by us in 1908, has proved in growing contests all we claimed for it. **Routledge Prize** certainly is a prize oat, and a real prize-winner at the county fairs wherever it has been shown. This grand oat belongs to the tree or branching class, and is a vigorous, healthy grower of strong stooling qualities. This is one of the heaviest yielding oats introduced to date. From several hundred samples we sent out, spring of 1908, the lightest yield reported was over 100 bushels per acre, and from that up to 200 and 300 bushels where it was given special cultivation. Under ordinary conditions and good soil, we know of no variety that will out yield it.

Routledge Prize Oat is a very early, drought-resisting variety. Grain of good size, plump and heavy, and one that matures quickly, making it a very valuable variety where the seasons are short. While this is really a spring oat, it can safely be planted in the fall in the Willamette Valley or any locality where the winters are mild. White seeded variety.

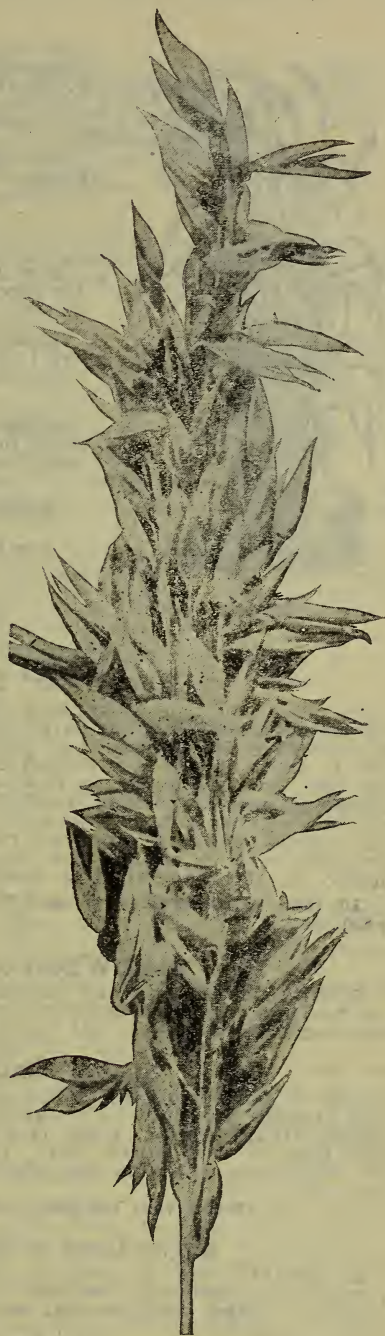
Prices: 1 lb. 20c; 3 lbs. 50c, postpaid; not prepaid, 1 peck, 60c;  $\frac{1}{2}$ -bushel, \$1.00; 1 bushel, \$1.50; 100 lbs., \$3.75.

## Shadeland Challenge

The best white side oat we know of. Hardy, vigorous, early maturing, and still maintains its supremacy as the best, heaviest yielding, general purpose Oat in existence.

"**Shadeland Challenge**" is a heavy, plump, thin-hulled oat whose immense heads often measure 18 inches in length, bearing from 250 to 300 kernels. Shadeland Challenge ripens in about 100 days from planting if spring sown, and 100 bushels per acre is not uncommon on ordinary soil. Can be planted in the fall (where the winters are mild) or as early as possible in the spring.

Price: 1 lb. 20c; 3 lbs. 50c, postpaid; not prepaid, peck, 50c; bushel \$1.50; 100 lbs., \$3.25.



Routledge Prize.

## White, Gray or Black Seed Oats

We always aim to have a selected cleaned stock of good White, Black or Gray Seed Oats. Can sell them at about market price for No. 1 seed. When ready to buy, write us for prices, stating quantity wanted, or order at \$1.10 per bu., 3 bu. \$2.75, and you will get good value.

**DON'T** Practice false economy by buying low-priced grains. It don't pay. Our motto—Quality First Price as Low as we can make it.





Millet.

### Kaffir Corn

An excellent fodder plant. Seed small and almost round, valuable poultry and pigeon food. It does best sown thinly in drills three feet apart. 10 lbs. 90c; per lb., postpaid, 20c

### Lentils

Succeed best in dry, sandy soil. A leguminous annual, the seeds of which are valuable for pigeons and are used largely for soups. The leafy stalks make good forage.

Per lb., postpaid, 25c

### Millet

Sow in April, May or June, 20 pounds for seed or 35 pounds for hay per acre. Must be sown early to mature in Willamette Valley.

**EARLY FORTUNE.**—This variety seems to do extra well here; try it. Heads large and loose, and seed is amber red and three times as large as the German. Makes good poultry feed.

10 lbs., 85c; 100 lbs., write; per lb., postpaid, 20c

**GERMAN.**—An improved variety, yielding a larger crop of seed than the common millet. It is also taller than the common, and yields a heavier crop of hay.

10 lbs., 85c; 100 lbs., write; per lb., postpaid, 20c

**HUNGARIAN.**—A dwarf millet; superior for hay.

10 lbs., 85c; 100 lbs., write; per lb., postpaid, 20c

For price on Millet for feed, see Poultry Foods.

## Profitable Potatoes for Seed—See Page 27

### Rape, Dwarf Essex

We offer you true, pure seed. One of the best forage plants, on account of the large amount of green feed it will produce at a season of the year when everything else is dried up. It has yielded ten tons of green forage per acre, and has twice the feeding value of green clover. Sheep, swine, cattle and poultry eat it readily. Rape will do well on almost any soil. Prepare the ground as for turnips, and sow any time from May till September; or plant it with grain. Sow, per acre three pounds, in drills; or, if broadcast, five pounds.

10 lbs., \$1.50; write for quantity prices; per lb., postpaid, 25c.

### Seed Wheat or Rye

When ready to buy any variety of Seed Wheat, write us for quotations on quantity wanted or send in your order and we will give full value at lowest market price.

### Speltz—Emmer

Sow in the spring, the same as wheat, at the rate of two bushels per acre. Cut when the grain is past the middle stage of milk, when it will make splendid grain and lots of rich straw hay. Thresh like wheat, only not so closely. Can be fed whole, rolled like barley, or ground.

10 lbs. 75c; 100 lbs., write; per lb., postpaid, 20c

### Sugar Cane or Sorghum

A valuable crop to grow for fodder or ensilage, as it furnishes an immense tonnage to the acre.

10 lbs., 85c; 100 lbs., write; per lb., postpaid, 20c

### Vetches

**OREGON VETCH** (*Vicia Sativa*).—Oregon's greatest forage plant. Often called Fall Vetch. Grown very extensively in Western Oregon and Washington, especially in the Willamette Valley and on the Oregon coast. It furnishes an abundance of excellent feed, either green or dried. The seed is generally mixed with wheat, oats or rye having a stiff straw to hold it up. Sown alone 85 pounds or 60 pounds with a bushel of grain per acre. Sow in the fall or early spring.

10 lbs., 65c; 100 lbs., write; per lb., postpaid, 20c

**HAIKY SAND OR WINTER** (*Vicia Villose*).—This variety thrives on poor arid, sandy soils. It is sown in the fall or spring, mixed with rye, which serves to support the plants. Sow 20 pounds per acre.

10 lbs., \$2.50; per lb., postpaid, 35c



Vetches.

### THE WISE ONES

Will use Mulford's Vetch Culture to inoculate their seed before sowing. There is no question about its VALUE. "Evidence," a new booklet, will prove it. (See page 35.)

Single pound prices are prepaid, but ten, fifty and one hundred pound prices are NOT prepaid and subject to market changes. See notes page 41. For amount of seed to sow per acre see table inside back cover.





Our flower seeds are grown by specialists and are unsurpassed. The following list contains a general assortment of the choicest and most popular and easiest grown flowers for conservatory, greenhouse or garden culture.

**CULTURAL DIRECTIONS.**—Cultural directions are printed on the back of nearly all packets. Flowers usually succeed best in a sandy loam, made rich with well-rotted manure, which should be made fine and thoroughly mixed with the soil. A soil thus prepared will remain moist and loose, so that flower seeds, which are generally small and delicate, will germinate and grow with vigor.

Two-page pamphlet, "Cultural Directions," free on request. Use "C-M" for flower beds. Page 37.

**ANNUALS** grow from seed, flower, mature their seed, and die in one year, or, in other words, the same season.

**HALF-HARDY ANNUALS** are those which should be started early in the house, conservatory or hotbed, and transplanted to the garden in settled warm weather.

**HARDY ANNUALS** are those which can be sown in the open ground.

**NOTE.**—Half **HARDY ANNUALS** and **H. H. PERENNIALS** are hardy in the **WILLAMETTE VALLEY**.

**BIENNIALS** grow from seed, sown from June to August, flower, ripen their seed and die the next year, though some varieties bloom the same season if sown early in gentle heat.

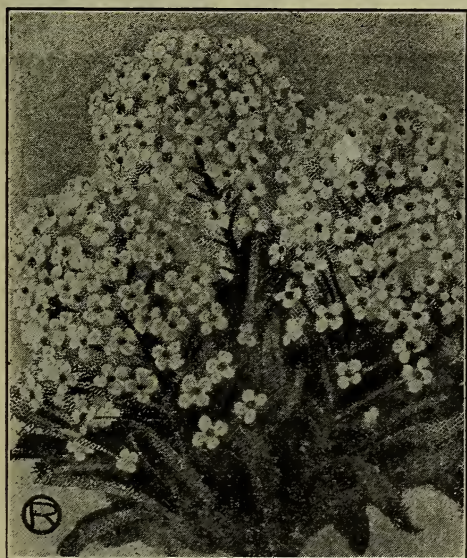
**HARDY BIENNIALS** will winter in the open ground without protection.

**HALF-HARDY BIENNIALS** require the protection of a cold-frame or cool-house during winter.

**PERENNIALS** grow from seed, and continue flowering annually for many years after the first season. Some varieties flower the first season if planted early in gentle heat.

**HARDY PERENNIALS** can remain in the open ground during winter without protection.

**HALF-HARDY PERENNIALS** require the protection of a cold-frame or cool-house during winter.



Sweet Alyssum.

### Acroclinium

Hardy annual, with everlasting flowers; good for cutting; flowers double and dry nicely if cut in bud; 1 foot; July to October.

**Album.**—Double white. Pkt. 5c

**Mixed.**—All colors. Pkt. 5c

### Ageratum

Half-hardy annuals, especially well adapted to edge large beds of geraniums, salvia coleus or cannas; flower continuous through the summer. 15 inches.

**Mexicanum.**—Dwarf, blue. Pkt. 5c; ¼ oz. 25c

**Album.**—Pure white, dwarf. Pkt. 5c; ¼ oz. 25c

**Finest Mixed.**—All colors. Pkt. 5c; ¼ oz. 20c

**Dwarf Little Blue Star.**—New; one of the handsomest blue-flowered dwarf edging plants; grows 5 inches high, and is just covered with small, bright blue flowers. Pkt. 10c

### AGROSTEMMA—Rose of Heaven

**Coeli-Rosa.**—Superb free-flowering, hardy annual, rose-colored flowers; fine for cutting; height 1½ feet; July to September.

Pkt. 5c; ¼ oz. 20c

### ALOYSIA—Lemon Verbena

**Citriodora.**—A greenhouse shrub, valuable for the fragrance of the foliage; 2 feet. Pkt. 10c

### Alyssum

One of the most popular hardy annuals, used especially for edging and also valuable for cutting on account of the fragrance of flowers.

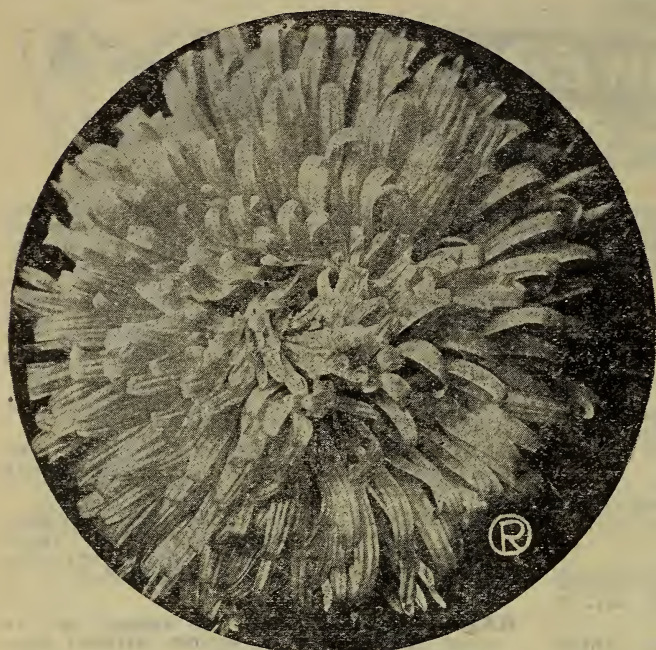
**Sweet.**—Pure white; 6 inches; June to November. Pkt. 5c; oz. 35c

**Little Gem.**—The dwarfest and best for design bedding; plants very compact and bushy, and grow only 3 inches high. Pkt. 10c; oz. 75c

**Lilac Queen.**—Dwarf, compact, lilac flowers. Pkt. 10c

**Saxatile Compactum (Gold Dust).**—Hardy perennial; yellow flowers; April to June; height 9 inches. Pkt. 10c; ¼ oz. 20c



**Improved Giant Crego Aster.****White Fleece**

One of the largest and most perfect of the early flowering (Comet type), bearing flowers 5 inches and over across, formed into a plummy globe of glistening white; blooms at the same time as Lavender Gem, making a splendid companion.

Pkt. 10c; 1/8-oz. 75c

**Mikado**

Very similar to the Crego's Giant, but more dwarf in growth and comes into bloom fully two weeks earlier. The plants attain a height of about 18 inches, of branching habit, and the flowers, borne on long, strong stems, are of colossal size, five and six inches across. We offer two colors, viz.:

**Mikado Pink** (or Rochester). A charming shade of pink suffused with lavender.

Pkt. 10c; 1/8-oz. 75c

**Mikado White.** Of purest glistening white; a magnificent and artistic flower.

Pkt. 10c; 1/8-oz. 75c

**New Giant Comet**

Considered by many to be the most beautiful of all the Asters (see cut). It is an ideal cutting variety, as each plant bears freely exquisitely formed large flowers on long stiff stems.

**Pure White, Pink, Crimson, Violet or Finest Mixed.**

Pkt. 10c; 1/8-oz. 50c

**Lavender Gem.**—One of the best; comet type; early and a charming shade of lavender; excellent in every way.

Pkt. 10c; 1/8-oz. 75c

**New Crimson Giant**

A late-branching variety of upright growth with extra large, densely double flowers of rich blood-crimson; makes a brilliant bed or border and is splendid for cutting. The form of the flower is nicely shown in plate above.

Pkt. 10c

**ASTERS, FINE MIXED.**—Many kinds.

Pkt. 5c

**Asters**

One of the easiest and most satisfactory summer and fall flowers to grow. We take the utmost pains to select seeds from the most perfect flowers only, and wish to assure our patrons that our strains are the superiority of perfection.

**Improved Giant Crego**

The most beautiful and desirable aster we have ever seen; very hardy, free-flowering and one of the best for general planting; the plant is a strong, healthy grower, and will produce 12 to 15 long-stemmed flowers of the most graceful and pleasing style (see cut). With ordinary care you can grow flowers measuring 5 to 6 inches across. Most of the handsome large aster blooms you see in the Portland flower stores are of this kind.

**Pure White, Shell Pink, Rose Pink, Lavender or Mixed.**

Pkt. 10c; 1/8-oz. 75c

**SPECIAL.**—One packet each of the four colors only 30c.

**QUEEN OF THE MARKET.**—Most valuable for early cutting; the plants branch freely and produce a great many well-formed flowers nearly a month in advance of the later sorts.

**White, Pink, Lavender or Finest Mixed.**

Pkt. 10c; 1/4-oz. 40c

**Superb Late Branching.**

**SUPERB LATE BRANCHING.**—The most popular late-flowering aster. Flowers are very full, large in size, 3 to 4 inches across and borne on long stiff stems 2 to 2½ feet high. A very desirable, beautiful and satisfactory variety.

**Deep Rose, Dark Blue, Light Blue, Shell Pink, White or Finest Mixed.**

Pkt. 10c; 1/4-oz. 60c



**AMARANTHUS**

**Caudatus (Love-Lies-Bleeding).**—Hardy annual; ornamental foliage plant; fine for bedding; green foliage with long, drooping crimson racemes; 2 feet. **Pkt. 5c**

**Cruentus (Prince's Feather).**—Dark red foliage and feathery flowers; 2 feet. **Pkt. 5c**

**Tricolor (Joseph's Coat).**—Ornamental; for foliage only; red, yellow and green. **Pkt. 10c**

**ANTIRRHINUM—Snapdragon.**

Half-hardy perennial and annual; blooms in July if sown early in the house; one of our finest cut flowers; 2 to 3 feet.

**Queen Victoria.**—New, tall; very large; pure white; superb. **Pkt. 10c**

**Daphne.**—Soft blush pink. **Pkt. 10c**

**Golden Queen.**—Rich, pure yellow. **Pkt. 10c**

**Defiance.**—Brilliant scarlet **Pkt. 10c**

**Tall Giant, Finest Mixed.**—Our seed of this is exceptionally fine; height, 3 feet. **Pkt. 5c; 1/8-oz. 25c**

**Semi-Dwarf, Finest Mixed.**—Fine for bedding; 18 inches. **Pkt. 5c; 1/8-oz. 25c**

**AQUILEGIA—Columbine**

Hardy perennials; are most elegant plants and invaluable for cutting or as hardy border flowers; beautiful and graceful; June to September. 2 to 3 feet.

**Benary's Long Spurred.**—Superb mixture of all the most desirable shades. **Pkt. 10c; 1/8-oz. 50c**

**Single, Finest Mixed.** **Pkt. 5c; 1/4-oz. 20c**

**Double, Finest Mixed** **Pkt. 5c; 1/4-oz. 20c**

**ARABIS—Rock Cress**

**Alpina.**—Hardy perennial; pure white flowers in close head; excellent for edging, rockwork or dry situations; 6 inches; April to June. **Pkt. 5c; 1/4-oz. 25c**



Aquilegia (Columbine).



Antirrhinum.

**ASPARAGUS**

**Plumosus Nanus.**—A graceful pot plant for either house or conservatory (see illustration under Fern Plants); very finely cut, delicate lace-like foliage. **Pkt. 25c; 100 seeds \$1.00**

**Sprengeri.**—Drooping foliage; adapted for hanging baskets or cutting. **Pkt. 10c; 100 seeds 50c**

**BABY BREATH.**—See Gypso. phila, page 56.

**BALSAM—Lady Slipper**

Hardy annual, succeeding best in sunny situations, rich loam and moisture; very showy and of easy culture; 1½ feet; July to September.

**Prize Mixture.**—This strain will produce the most perfectly formed double flowers in the greatest variety of colors. **Pkt. 10c; 1/4-oz. 35c**

**Improved Camelia-Flowered Finest Mixed.**—Large, extra double flowers. **Pkt. 5c; 1/4-oz. 35c**

**BELLIS—Double English Daisy**

Popular spring and summer flowering perennial; fine for borders; height 4 inches. Easily raised from seed sown from early spring to September; April to September.

**Double Mixed.** **Pkt. 10c**

**Longfellow.**—Double pink flowers. **Pkt. 10c**

**Snowball.**—Free flowering; pure white. **Pkt. 10c**

**Giant Red or Giant White.**—Mammoth in size; very rare. Give them rich ground. **Pkt. 25c**

**BEAN**

**Scarlet Runner.**—The well-known, rapid-growing annual climber, with bright red flowers, from July to September; height 8 feet. **Pkt. 5c; 1/4-lb. 15c**

Aberdeen, Wash., May 7, 1916.

Gentlemen: I received the seeds and roots that I sent for in first class condition, for which accept my thanks.

Yours truly,  
MRS. MABEL MORTIMER.

**USE "WONDER."**—The best Fertilizer and plant food known. A teaspoonful to a plant does wonders. See page 36.



**Balloon Vine.****BALLOON VINE (Love-in-a-Puff)**

A rapidly growing annual climber; succeeds best in light soil and warm situation; flowers white; seed vessels look like miniature balloons and of great interest to children; 8 to 10 feet (see cut).

Pkt. 5c; ½-oz. 15c

**BROWALLIA—Amethyst**

A very profuse blooming, half-hardy annual bedding plant, bearing during summer and autumn handsome winged flowers of different shades of blue; 1½ feet.

Finest Mixed.

Pkt. 5c; ¼-oz. 25c

**CALCEOLARIA**

An ornamental plant, and a universal favorite; produces a mass of beautiful puffed, pocket-like flowers of brilliant, self-colors and spotted. Our strains of Calceolaria are very fine.

**Hybrida Grandiflora.**—Flowers of immense size; seeds saved from finest specimens.

Pkt. 35c

**Calendula—Pot Marigold**

Hardy annual; one of the most universal garden flowers. The flowers appear in solitary heads on stout stalks; large, with flat, spreading rays; very showy; flowers the entire season; 1 foot.

Double Finest Mixed.

Pkt. 5c; ¼-oz. 15c

**Calliopsis**

Showy and beautiful free-flowering annuals, of the easiest culture, doing well in any sunny position, blooming all summer and excellent for cutting and massing. Don't confuse this with the perennial Coreopsis, page 53.

**Finest Mixed.**—Annual; all shades of yellow, red and brown.

Pkt. 5c; ¼-oz. 20c

**Hybrida Superba.**—Showy new shades in all of the choicest varieties.

Pkt. 10c; ¼-oz. 35c

**Golden Ray (Radiata).**—This new Calliopsis, in form like a miniature cactus dahlia, is one of the most beautiful and free flowering; from out of the dark-brown center the petals shade into bright, golden yellow rays, thus giving each flower an elegant and striking appearance; bushes compact and very free in bloom.

Pkt. 10c

**Calliopsis.****CALLIRHOE—Poppy Mallow**

Hardy perennial; beautiful trailing plant, with palmate foliage; flowers large, crimson, with white center; fine for rock-work; 1 foot; June to October.

Involuerata.

Pkt. 5c; ¼-oz. 35c

**CANARY BIRD VINE**

A rapid-growing summer-climbing annual, 10 to 15 feet high; it will cover trellis work in the most graceful manner, producing hundreds of pretty winged, bright yellow flowers.

Pkt. 5c; ¼-oz. 20c

**Canary Bird Vine.**

Perennial Flowers are rapidly gaining in favor. MORE should be planted; they are beautiful in borders, beds or among shrubbery, and flower each year. You gain 1 year by buying our field grown plants. See pages 78 to 82.



**CANTERBURY BELLS** (*Campanula Medium*)

Very ornamental garden plants of easiest culture; excellent for cutting; hardy biennial, 2½ feet high, producing large, bell-shaped flowers of exquisite colors. Hardy biennials. (See plants page 72.)

**Single, Finest Mixed, all colors.**

Pkt. 5c; ⅛-oz. 15c

**Single White, Blue or Rose.**

Pkt. 10c; ⅛-oz. 20c

**Double Mixed, all colors.** Pkt. 10c; ⅛-oz. 25c

**E. R.'s PRIZE MIXTURE.**—A mixture which contains every color and kind of both single and double biennial and perennials.

Pkt. 10c; ⅛-oz. 25c

**CALYCANTHEMA** (Cup and Saucer Canterbury Bells).—This is unquestionably one of the finest types; they have an extra large calyx, which is of the same color as the flower, giving the appearance of a cup and saucer.

Pink, Lilac, Rose or White.

Pkt. 15c; 2 for 25c; ⅛-oz. 50c

**Mixed Colors.**

Pkt. 10c; ⅛-oz. 35c

**Campanula—Bellflower**

Well-known, beautiful, hardy herbaceous perennials, bearing a great profusion of attractive bellflowers; thrives best in light, rich soil; some of the varieties flower the first season if sown early.

**PERSICIFOLIA GRANDIFLORA** (Peach Bells).—Undoubtedly one of the finest of the hardy Bellflowers; grows 2 to 3 feet high, with large single flowers.

Blue, White or Mixed. Pkt. 10c; ⅛-oz. 50c

**CARPATICA** (Carpathian Hare-Bell).—Free-flowering, hardy perennial, continuing in bloom the whole season; color clear blue or white; grows 6 inches high; especially good for edging.

Blue or White.

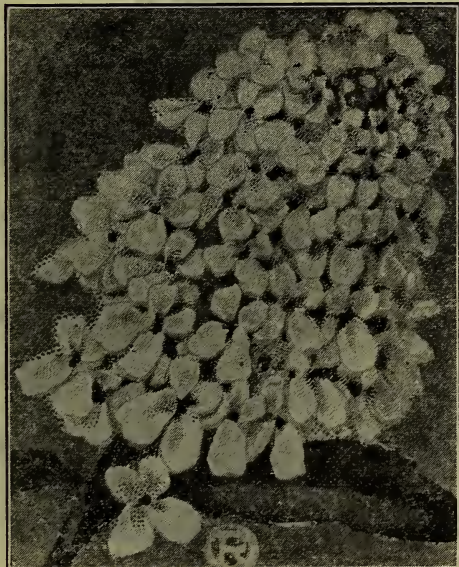
Pkt. 5c; ¼-oz. 40c

**Candytuft—Iberis**

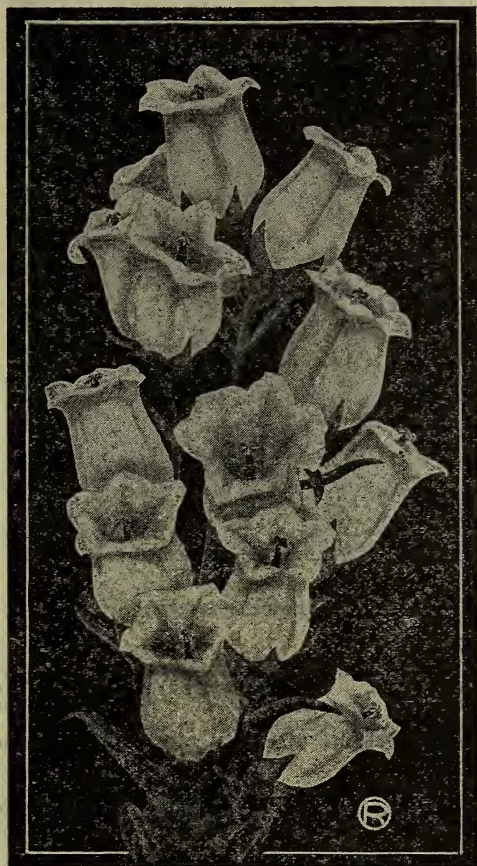
Very popular free flowering annual, fine for beds or cutting; 1 foot. June to frost if sown early and late.

**Empress.**—A large flowered variety of purest white; grown extensively for cut flowers; very desirable.

Pkt. 5c; ¼-oz. 20c



Candy Tuft.



Single Canterbury Bells.

**Pink Beauty (Novelty).**—Fine, true pink; an exquisite flower. Pkt. 10c

**Dwarf White Little Prince.**—Grows but six inches high and throws up strong trusses of pure white flowers; excellent for edging or bordering.

Pkt. 10c; ¼-oz. 50c

**Crimson or Lilac.**—Very desirable colors, your choice. Pkt. 5c; ¼-oz. 15c

**Finest Mixed, all colors.** Pkt. 5c; ½-oz. 20c

**Sempervirens.**—Perennial; pure white flowers, evergreen foliage; blooms in June; fine for edging, borders and rockeries, 1 foot. Pkt. 10c; 1-16 oz. 35c

**CARDINAL CLIMBER**

This glorious and absolutely distinct new annual climber is undoubtedly the greatest acquisition to the flower world in years, and the most beautiful and brilliant climber ever grown. It is a strong and rapid grower, attaining a height of twenty-five feet with beautiful fern-like lacinated foliage and literally covered with a blaze of fiery cardinal red flowers from midsummer to frost. The flowers are about 1 inch in diameter and are borne in clusters of five to seven blooms each. Like all "Ipomoeas" it delights in a warm, sunny situation and good, rich soil. The seed should be soaked in water a few hours before sowing and not planted outside until about May first.

Pkt. 15c; 2 pkts. for 25c

**GREAT FOR FLOWER BEDS.**—Read page 37, which tells all about our new product—"C-M"—Kiln-dried Pulverized Cow Manure.





**Centaurea Cyanus.**  
**Bachelor's Button.**

## CANNA

A beautiful, large-leaved, showy flowering plant. Seed must be soaked before planting and started in a hot bed under glass. (For Canna Roots, see page 89.)

**Crozy's Hybrids Mixed.** Pkt. 5c; oz. 35c

## Carnation

Everyone loves Carnations. For started plants of the finest named varieties, see page 73.

**MARGARET CARNATIONS.**—The earliest to bloom, and producing large, double, sweet-scented flowers; being half-hardy perennials, if they are slightly protected during the winter they will survive and flower profusely the next spring.

**Red, White or Yellow.**—Large flowers. Pkt. 10c; ¼-oz. 50c

**Choice Mixed.** Pkt. 5c; ¼-oz. 35c

**Benary's Giant.**—Extra large flowering and of the most beautiful colors.

Pkt. 10c; ½-oz. 50c

**CASTOR OIL BEAN.**—See Recinus, page 64.

## CELOSIA CRISTATA—Cockscomb

Showy annuals of easy cultivation; 1 foot; producing large, brilliant, comb-like flower heads.

**Glasgow Prize.**—Showy, dark crimson combs. Pkt. 10c; ½-oz. 50c

**Finest Mixed.**—Rich mixture of finest dwarf kinds. Pkt. 5c; ½-oz. 40c

## CELOSIA PLUMOSA—Feathered

**Cockscomb**

The plant grows 2 to 3 feet, is of handsome pyramidal form, and the numerous massive plumes, which resemble an ostrich feather waving gracefully above the foliage, make it one of the most effective; of easy culture.

**Thompsoni Magnifica.**—The most perfect in constant bloom from July to November;

**Finest Mixture.** Pkt. 10c; ¼-oz. 50c

**Golden Plume.** Pkt. 10c

**Crimson Plume.** Pkt. 10c

## CENTAUREA—Dusty Miller

These are grown for foliage only; half hardy annuals; leaves are silver-coated.

**Candidissima.**—Thick, white, upright cut leaves; 1 foot. Pkt. 10c

**Gymnocarpa.**—Fine, fern-like leaves, very graceful and showy; 1½ foot.

Pkt. 10c; ½-oz. 25c

## Centaurea Cyanus

**Bachelor's Button, Cornflower.**—Very popular annuals; will grow in the poorest of soil, either on seashore or mountains; seed can be sown either in fall or spring; sandy soil preferable; height, 2½ feet.

**Finest Single Mixed.** Pkt. 5c; oz. 35c

**CENTAUREA CYANUS fl. pl.** (Double Bachelor's Button). Beautiful large double flowers.

**Double Blue.** Pkt. 10c; ½-oz. 25c

**Double Mixed.** Pkt. 10c; ¼-oz. 25c

## Royal Sweet Sultans

**CENTAUREA IMPERIALIS** (Giant Cornflower).—The flowers are of enormous size, fragrant and of charming colors; in form they resemble the fuzzy part of the thistle bloom. In colors from white to red to purple. Excellent for cutting.

**Marguerite.**—Flowers 4 inches across; purest white. Pkt. 10c; ¼-oz. 40c

**MOSCHATUS** (Sweet Sultan).—Hardy annual, with very fragrant and showy flowers; 1½ feet; June to September.

**Finest Mixed.** Pkt. 5c; ¼-oz. 25c

**SUAREOLENS** (Yellow Sweet Sultan).—Very showy. Pkt. 5c; ¼-oz. 20c

## CHINESE WOOLFLOWER

A new annual flower. Very showy, odd and novel. The bunches of wool-like glowing crimson flowers are produced in profusion. Flowers come early and do not fade until hit by frost. Height 2 to 3 feet. Start early and transplant after danger of frost is over.

Pkt. 15c; Plants in Season 10c Each



**Chinese Wool Flower.**

We have Annual Flowering Plants in any quantity during April, May and June. See General Price List, page 75.





Cosmos.

## Cosmos

Beautiful autumn-blooming plants. They produce thousands of beautiful flowers in pure white, pink and crimson shades, furnishing an abundance of cut blooms for autumn decorations when other flowers are scarce. Can be sown in spring in the open ground, when danger of frost is past, or if wanted early the seed should be started under cover and afterwards transplanted. Set plants not less than 18 inches apart. When about a foot high the tops should be pinched out to induce a bushy growth. They do well almost anywhere.

**EARLY FLOWERING MAMMOTH.**—Claimed to be as large as the Mammoth Perfection and to flower in July and August.

**Mixed Colors.**

Pkt. 15c; 2 for 25c; ¼-oz. 35c

**BENARY'S EARLY FLOWERING.**—If sown early, flowers can be picked in July. Grows 4 feet high; flowers large and beautiful. **Crimson, White, Pink or Mixed.**

Pkt. 10c; ¼-oz. 20c

**KLONDYKE.**—Golden yellow, flowers large and borne on long stems; medium early.

Pkt. 10c

**GIANT PERFECTION.**—Flowers often 4 inches across; plants 7 feet high; blooms do not appear until October. If topped when half grown plants will bloom earlier. **White, Pink, Red or Mixed.**

Pkt. 5c; ¼-oz. 25c

## Pink Lady Lenox

Gigantic flowers, with wide, overlapping petals of splendid substance, making a perfectly circular flower which is borne on very long stems, in color a beautiful deep rosy-pink.

Pkt. 10c; ¼-oz. 20c

## Coreopsis

**Lanceolata Grandiflora.**—Hardy perennial; with large, showy, bright yellow flowers, produced in the greatest abundance from June till frost. As a cut flower they stand near the head among hardy plants, having long stems and lasting in good condition a week or more. Easily grown from seed, flowering the first year, if sown early under glass. **Pkt. 10c; ¼-oz. 25c** (See illustration and plants, page —.)



Cobaea Scandens.

## CHRYSANTHEMUM

These are very showy flowers of easiest cultivation, flowering from July to frost; excellent for cutting; height 2 feet. (For plants, see page 68.)

**Single Annual, Finest Mixed.**

Pkt. 5c; ¼-oz. 25c

**Double Annual, Finest Mixed.**

Pkt. 5c; ½-oz. 20c

**Japanese Early Flowering (Double Flowering).**—These flower in the open ground from August to November; splendid plants for show effect; height 3 feet.

Pkt. 15c

**Leucanthemum.**—(See Shasta Daisy, under Daisies, page 54.)

## CINERARIA

**Hybrid Grandiflora.**—We pride ourselves in offering the choicest strain of this gorgeous flower; grand, large blooms in umbel spikes are borne way above the foliage; colors and markings are superb; 1½ feet; tender annual for pots. **Pkt. 35c**

## Clarkia

A mighty handsome annual; of easy cultivation; flowers resemble carnations and flower freely; colors, white, crimson, orange shades; 2 feet; July to October.

**Elegans.**—Double mixed. **Pkt. 5c; ¼-oz. 25c**

## Cobaea Scandens

Our most popular and rapid climbing annual, flowering the first season. Pretty, purple, bell-shaped flowers appear in great profusion during the fall months; foliage very graceful; 20 feet. Start seed under glass. (For plant, see page 75.)

Pkt. 10c; ¼ oz. 25c

## COLEUS

Splendid bedding plants, with beautifully colored foliage; easily grown from seed if kept in warm temperature; tender perennial that must be started under glass.

**Benary's Exhibition.**—Superb. **Pkt. 25c**

Woodburn, Ore., Mar. 10, 1916.

Dear Sirs: I received my last order in fine shape and much sooner than I expected it. Am sending you another order today.

Yours truly,

HERMAN OTJEN.

**CULTURAL DIRECTIONS FREE.**—Our 2-page leaflet gives full instructions on growing flowers from seed. Free on request.



**CYCLAMEN**

Beautiful plants for the window or greenhouse, with mottled leaves and rich-colored flowers. The strain we offer below has gained a reputation for its large size, perfect form and brilliant colors.

**Giganteum.**—Finest mixed. Pkt. 35c

**CYPRESS VINE**

A fast-growing annual vine, with feathery, dark-green foliage and star-like flowers; July to October; 20 feet. Plant early, in light soil and warm location.

**Finest Mixed.** Pkt. 5c; ½-oz. 20c

**Dahlia**

This very popular flower can easily be raised from seed; started inside in March will produce flowers in August.

**Cactus Mixed.**—Double flowers with pointed petals (see cut). Pkt. 20c

**Double, Finest Mixed.**—Produce flowers of the "Show" or "Decorative Class." Pkt. 10c

**Single Giant Perfection.**—Single flowers of great size and beauty. Pkt. 10c

**DAHLIA BULBS.**—Latest and best. (See pages 91-95.)

**Daisies—Shasta Daisy**

**SHASTA.**—Very popular and desirable perennial; the large single white flowers are freely produced on long stems. We offer you the best strain in plants or seed. (See cut in Plant Department, page 78.) Pkt. 15c

**DOUBLE DAISIES.**—(See Bellis, page 49.)

**Delphinium—Perennial Larkspur**

(See cut, page 79.) Handsome, hardy perennial plants for the herbaceous border and shrubbery, producing a profusion of splendid spikes of flowers throughout the summer; will usually bloom the first season. (For large plants, see page 79.)

**Cashmerianum.**—18 inches high; large, dark blue flowers; spreading habit. Pkt. 15c; ½-oz. 75c

**Chinese Azureum.**—Branches very freely and produces its flowers in greatest abundance; clear, deep blue; height 3 feet. Pkt. 5c; ½-oz. 15c

**Belladonna.**—Very free and continuous bloomer; delicate and beautiful; clear turquoise blue. Pkt. 25c; 5 pkts. \$1.00

**Formosum.**—Long-spurred, brilliant blue flowers, with white center; 3 feet; July to October. Pkt. 5c; ½-oz. 25c

**Elatum Hybridum.**—Superb collection of finest double blue varieties; 3 to 5 feet. Pkt. 15c; ½-oz. 50c



**Dimorphotheca—African Golden Daisy.**



**Dianthus.**

**Dianthus—Garden Pink**

All the varieties listed below are very desirable, and will flower the first season, even sown out of doors in May; they flower early and continue throughout the entire summer; they are excellent for cutting, and bedding; 1 foot.

**CINENSIS fl. pl. (Chinese Pink).**—Large, double flowers in unlimited variety of bright colors.

**Finest Mixed.** Pkt. 5c; ¼-oz. 25c

**HEDDEWIGII fl. pl. (Double Japan Pink).** Beautiful rich colors.

**Finest Mixed.** Pkt. 5c; ½-oz. 20c

**FIREBALL.**—New, extra double, brilliant, dark scarlet; very beautiful.

Pkt. 10c; ½-oz. 30c

**SNOWDRIFT. (Lanceatus).**—Extra large, pure white, double, fringed.

Pkt. 10c; ½-oz. 35c

**BENARY'S PRIZE MIXTURE.**—Very rich mixture, all kinds.

Pkt. 5c; ½-oz. 25c

**SEMPERFLORENS (Perennial Hardy Ever-blooming Garden Pinks).**—Very beautiful, sweet-scented, double, semi-double and single flowers in great diversity of colors.

Pkt. 10c; ½-oz. 25c

**DIMORPHOTHECA AURANTIACA**

(African Golden Daisy.) Hardy annual, a great favorite on account of its handsome golden-orange flowers, which are borne most profusely all summer; 15 inches. Does well in dry situations. (See cut.)

Pkt. 10c; ½-oz. 25c

**FRUIT AND SHADE TREES, HARDY FLOWERING SHRUBS, ETC**

For complete descriptions and illustrations of our full list of Fruit Trees, Berry Bushes, Roses, Flowering Shrubs and Vines, Shade Trees, Evergreens, etc., ask for our 64-page Nursery Catalog, sent free on request. Remember, we have no agents and prepay freight or express charges on most all orders.

**A HEDGE of Free Flowering Dahlias is AS BEAUTIFUL and more showy than a hedge of ROSES.** They are in full bloom when other flowers ARE SCARCE. See pages 91 to 96.



**Digitalis—Foxglove Plant and Flower Spike.****Digitalis—Foxglove**

Hardy perennials; very desirable for effective massing or grouping; invaluable either in the hardy border, between shrubs or in solid beds; 3 to 5 feet. For strong flowering plants, see page 79.

**Beauty Mixture.**—Comprising all the choicest colors. Pkt. 5c; ¼-oz. 50c

**Gloxinaeflora, Finest Mixed.**—Flowers spotted similar to Gloxinias. White, pink and purple flowers. Pkt. 5c; ¼-oz. 25c

**Gloxinaeflora Rosea.**—Very desirable, flowers rosy pink. Pkt. 10c; ¼-oz. 40c

**Montrosa (Mammoth Foxglove).**—The tall spikes are surmounted by one monstrous flower; all colors mixed. Pkt. 10c; ¼-oz. 50c

**DOLICHOS—Hyacinth Bean**

Annual climbers; beautiful foliage and clusters of hyacinth-like purple and white flowers, borne in clusters; 10 feet; July to September.

**Daylight.**—Snow-white flowers. Pkt. 5c

**Mixed.**—White and purple. Pkt. 5c; oz. 25c

**ECHINOCYSTIS LOBATA**

**Wild Cucumber.**

The fastest-growing annual vine in existence; will grow 20 feet in six weeks; pretty foliage and inconspicuous white flowers; soak seed in water over night before planting in dry weather.

Pkt. 5c; oz. 25c

**Gaillardia—Blanket Flower**

Splendid, showy plants for beds or borders; excellent for cutting; the hardy perennial varieties; if sown early will bloom the first season; July to frost; 1½ feet. (Field-grown plants, page 80.)

**Grandiflora Superba.**—Hardy perennial; splendid mixed varieties; in crimson and gold; 2 feet. Pkt. 10c; ¼-oz. 35c

**Grandiflora Semi-plena.**—A superb mixture of hardy, perennial, semi-double kinds.

Pkt. 15c; ⅓ oz. 25c

**Lorenziana.**—Hardy annual; double mixed colors; 2 feet. Pkt. 5c; ¼-oz. 25c

**Eschscholtzia—California Poppy.****Eschscholtzia—California Poppy**

One of the most popular garden annuals; 1 foot. Sow the seed where plants are to remain in the fall or early spring. It stands considerable cold and blooms early profusely and continuously until July. Later sowings for late flowers. (See cut.)

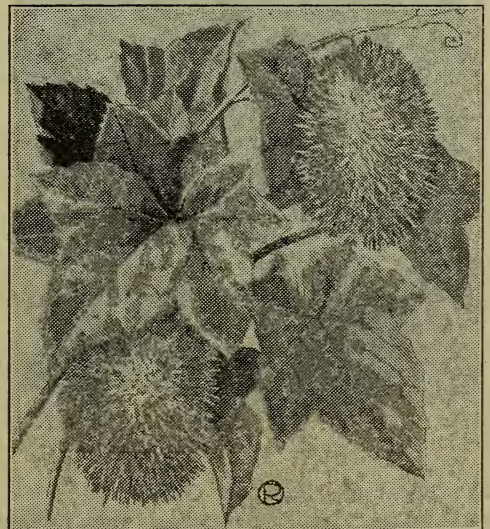
**Finest Mixed.**—All shades. Pkt. 5c; oz. 30c

**Californica.**—Bright yellow. Pkt. 5c; oz. 30c

**Alba.**—Pure white. Pkt. 5c; oz. 35c

**Carmine.**—A beautiful rose carmine. Pkt. 10c; oz. 40c

**Golden West.**—Very large, bright yellow flowers with orange centers. Pkt. 10c; oz. 35c

**Echinocystis—Wild Cucumber.**

**FEED YOUR PLANTS.** You must supply "food," in other words fertilizer, if you want the best results. Read about "Wonder," and "C. M.", pages 36-37, and ask for 20-page "Booklet."



**GERANIUM**

**Finest Mixed Hybrids.**—Pkt. 25c. (Strong plants, page 72-75.)

**GLOXINIA**

Showy free-flowering house plants. (For Gloxinia Bulbs, see page 88.)

**Hybrida Grandiflora.**—The best strain in existence, embracing all the choicest self-colored, tigered and spotted flowers.

Pkt. 25c

**GOMPHRENA—Globe Amaranth**

A dwarf hardy annual, with pretty clover-like beads of purple, white and red flowers; 2 feet; flowers everlasting.

**Finest Mixed.** Pkt. 5c; ¼-oz. 20c

**Godetia—Satin Flower**

This showy, hardy annual deserves greater popularity. Attractive flowers of satiny texture, from white to all shades of pink and crimson. They grow rapidly, and flower profusely in poor soil; of easy cultivation. Fine for seashore or mountain resorts; 1 foot; July to October.

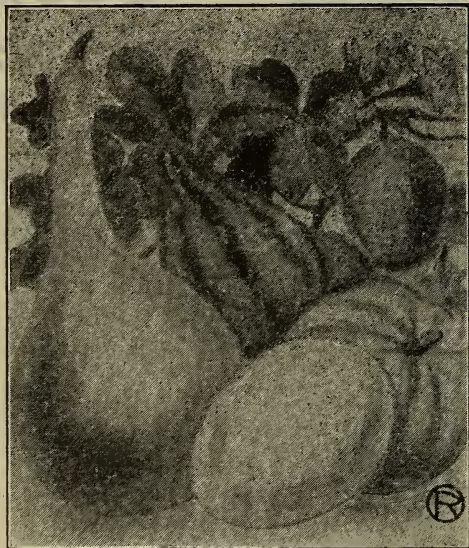
**White, Pink, Bright Red or Finest Mixed.**  
Pkt. 5c; ¼-oz. 25c

**Gourds**

**ORNAMENTAL.**—These are desirable in many places where an immense amount of vine is wanted quickly. Most sorts are good for 20 feet in a season and the blooms of some are quite striking and handsome. With many sorts the fruit is unique and ornamental and often useful. The small fancy gourds are excellent toys for children.

**Calabash.**—The famous pipe gourd, dipper shaped. Pkt. 10c; oz. 40c

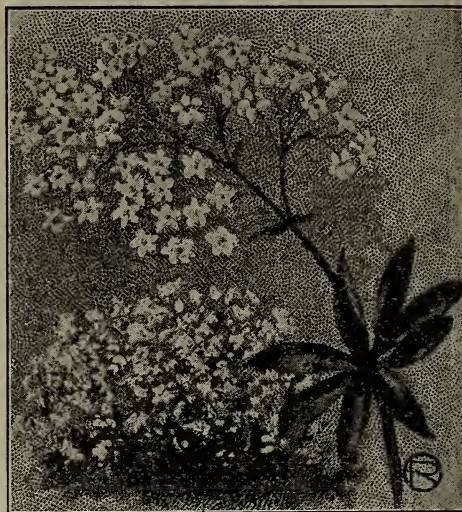
**Egg, Orange, Turk's Turban, Pear, Spoon, or Mixed, all kinds.** Pkt. 5c; ¼-oz. 10c



Ornamental Gourds.

**GYNERIUM—Pampas Grass**

**Argenteum.**—Hardy perennial; the famous pampas grass, with beautiful silvery plumes; 10 feet. (For strong plants, see page 80.) Pkt. 10c



Gypsophila—Baby's Breath.

**Gypsophila—Baby's Breath**

Pretty free flowering, elegant plants, succeeding in any garden soil. Their misty white panicles of bloom are largely used for mixing with other cut flowers. The annuals should be sown early in the spring and mid-summer for a continuous supply.

**Elegans Alba.**—Hardy annual, easily grown from seed; flowers pure white; 2 feet; June. Pkt. 5c; ½-oz. 25c

**Elegans Rosea.**—Hardy annual; flowers bright rose; very dainty; 2 feet. Pkt. 5c; ½-oz. 25c

**Muralis.**—Hardy annual; plants dwarf, about 6 inches; flowers shell pink; fine for borders or rock work. Pkt. 5c; ½-oz. 20c

**Paniculata.**—Hardy perennial; one of the finest for cutting; pure white flowers, very small, and borne in large, delicate sprays; June to September; 3 feet.

Pkt. 10c; ½-oz. 25c

(For strong roots of *G. Paniculata* for immediate effect, see page 80.)

**Paniculata Fl. Fl.**—New perennial; double-flowering; most desirable and valuable; pure white. Pkt. 25c; 2 for 35c

**Helianthus—Sunflower**

The single annual Sunflowers are indispensable for cutting and a bright display of yellow flowers in the garden, borders or among shrubs. Plant early in a sunny place and they will come into bloom early in the summer and keep up a constant supply of flowers until cut down by severe frosts in the fall. We offer some improved types of special merit.

**Globosus Fistulosus** (Globe or Dahlia Sunflower). Flowers large, double, very full in the center and of a rich saffron color; 6 feet. Pkt. 5c; ½-oz. 20c

**Perennial Mixed.**—A choice mixture of the best perennial varieties.

Pkt. 10c; ½-oz. 50c

**Cucumerifolius—Stella** (Improved Miniature Sunflower). Grows about 3 feet tall, covered with large single 5 to 6 inch flowers of the purest golden yellow, with black disc. Pkt. 5c; ¼-oz. 25c

**MORE HARDY FLOWERING SHRUBS** should be planted in the West—they give no trouble, increase in size and grow more beautiful year by year. See Nursery Catalog—Free.



**Helianthus—New Miniature.**

**Orion.**—Artistic and effective new variety of "Stella." The petals are twisted like a Cactus Dahlia. **Pkt. 10c**

**New Miniature Mixed.** A multitude of new varieties have been raised from the popular Miniature Sunflower, which we offer in mixture. They all differ from the parent, most of them being larger, and many with curiously twisted petals. The prevailing colors are pale yellow, golden yellow and creamy white, some with black centers, and all beautiful; for cutting they are indispensable. (See cut.) **Pkt. 10c**

### Heliotrope

Delightfully fragrant, tender perennial; popular pot and garden bedding plant; also for cutting. Some of the best plants may be raised from seed very readily; 1½ feet; start inside or under glass.

**MIDNIGHT.**—New; handsome, large flowers, lively shade of purple; foliage beautiful dark green; stem black. **Pkt. 15c**

**Finest Mixed.**—All colors. **Pkt. 5c; ¼-oz. 35c**

**Heliotrope.**

### Hollyhocks

Very popular perennials. Easily grown.

**ALLEGHENY.**—Semi-double; mammoth flowers, having the edges of the petals finely fringed and lacinated; will bloom the first year if sown early. **Choicest Mixed Colors. Pkt. 10c; ¼-oz. 40c**

**DOUBLE GERMAN EVER-BLOOMING.**—Will bloom the first year from seed, if sown early. **Pkt. 5c; ¼-oz. 40c**

**NEW ANNUAL EVER-BLOOMING.**—This is one of the best introductions of late years. Seeds sown in the house in March will produce flowers in July on plants 4 feet high; the plants do not attain their perfection until their second year, when they grow 7 to 10 feet high, and flower continuously from June till frost.

**Single Mixed. Pkt. 5c; ¼-oz. 25c**

**Double Mixed. Pkt. 10c; ¼-oz. 50c**

**CHATER'S IMPROVED.**—Our strain of this is the best that can be produced; seeds saved from the most double flowers.

**White, Pink, Crimson, Yellow, Lilac or Mixed. Pkt. 10c; ¼-oz. 65c**

### HOLLYHOCK

PLANTS IN  
ALL COLORS

OFFERED ON

PAGE 80.

**Hollyhock.**

### HUNNEMANNIA

**Fumariaefolia** (Giant Yellow Tulip Poppy.)—Hardy annual; foliage fern-like; flowers tulip-shaped, golden yellow; very showy; July to frost. **Pkt. 5c; ¼ oz. 25c**

**HUMULUS.**—See next page.

### IPOMOEA—Moonflower

**Grandiflora Alba.**—Large, heart-shaped leaves, and large, pure white flowers, which open only late in the evening; 10 feet. **Pkt. 10c**



**Humulus—Japanese Hop**

Hardy annual climber; of rapid growth; attains a height of 12 feet.

**Japonica Variegata.**—Foliage green and white; very pretty and effective; not affected with insects. Pkt. 10c; ¼-oz. 25c

**ENGLISH HOP ROOTS.** Each 10c



**Humulus—Japanese Hop.**

**KOCHIA—Tricophylla**

**Summer Cypress or Burning Bush.**—Annual; forms dense bushes of upright plumage-like foliage; during the summer they remain light green and in early fall they change to carmine and blood red; 2 feet; makes a dainty and showy hedge or nice single specimens. Pkt. 5c; ¼-oz. 25c

**KUDZU VINE—Pueraria Thumbergiana**

To this must be awarded first place as the fastest growing hardy climbing plant. It will grow 8 to 10 feet the first year from seed, and after it has become established there seems to be no limit to its growth, 50 feet in a single season being not unusual. Its foliage is large and covers well; it bears small racemes of rosy purple; pea-shaped blossoms towards the close of August. A splendid subject for covering permanently verandas, dead trees, etc. Pkt. 10c; ¼-oz. 25c

**Larkspur**

These are splendid, hardy annuals, which, when grown in beds or borders, make a pleasing effect, and the slender flower stalks, when cut, are most desirable for vases; July to October.

**Dwarf Germana Rocket.**—1 foot; compact growing bush; splendid spikes of double flowers in all colors. Pkt. 5c; ¼-oz. 20c

**Giant Hyacinth Flowered.**—3 feet; fine, compact spikes of beautiful flowers. Pkt. 5c; ¼-oz. 20c

**Emperor.**—Tall, slender spikes of exquisite double flowers in unlimited quantity; 3 feet. Pkt. 5c; ¼-oz. 20c

**PERENNIAL LARKSPUR.**—(See Delphinium, page 54.)

**LATHYRUS LATIFOLIUS**

**Perennial Sweet Pea.**—Free flowering, hardy perennial climbers, bearing beautiful flowers all season.

**White or Pink.**

Pkt. 10c; ¼-oz. 25c

**Mixed.**

Pkt. 5c; oz. 35c

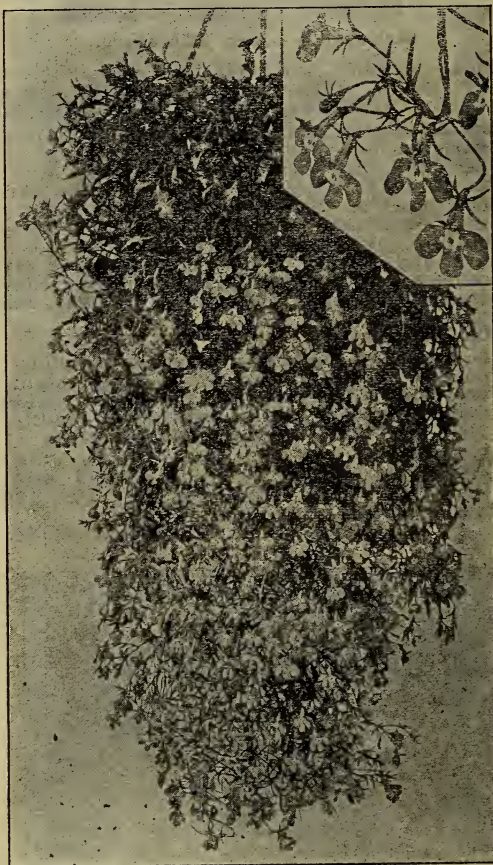
**LUPINUS**

Ornamental, free-flowering, easily grown, with long, graceful, upright spikes of rich and variously colored pea-shaped flowers; valuable for mixed borders and beds.

**Annual Dwarf Mixed.**—Valuable for cutting; 2 feet. Pkt. 5c; ¼-oz. 15c

**Polyphyllus Mixed.**—Showy perennials, growing stout and erect; good for cutting; flowers in great variety of colors; 3 to 4 feet; May and June. (For plants, see page 80.) Pkt. 5c; ¼-oz. 15c

**FLOWERING PLANTS.**—During the months of April, May and June we have thousands of choice, well-grown plants. See page 75.



**Trailing Lobelia—Sapphire.**

**Lobelia**

**Erinus Gracilis.**—Trailing bright blue flowers; excellent for vases, hanging baskets and window boxes. Pkt. 5c; ¼-oz. 25c

**Hybrida Sapphire (New.)**—This is by far the most beautiful trailing Lobelia to date; very large, deep sapphire blue flowers, with a large and clear white eye; very free and early flowering; extra long trailer, for baskets and boxes. Pkt. 15c

**BUY a package of WONDER ODORLESS FERTILIZER and feed your plants according to directions. YOU WILL BE PLEASED at the results. See page 36.**



**LOBELIA—Continued**

**Crystal Palace Compacta.**—Little dwarf bedding plant; dark blue flowers cover the whole plant during the entire season; very compact and used extensively in carpet bedding or edging; height 4 inches.

**Pkt. 10c; ¼-oz. 50c**

**White Gem.**—Compact little plants, covered with snow-white flowers. **Pkt. 10c**

**Cardinalis** (Cardinal Flower).—Hardy perennial, with spikes of deep cardinal red flowers; August and September; 3 feet.

**Pkt. 15c**

**MARVEL OF PERU—Four o'Clock**

Hardy annual, flowering from July to October; brilliant colors; 3 feet.

**Finest Mixed. Pkt. 5c; oz. 25c**



**African Marigold.**

**Marigold—Tagetes**

Widely grown, hardy annuals; invaluable for bedding and producing an elegant display of yellow, orange and brown flowers from early summer till frost.

**Mammoth African, Finest Mixed.**—Very large and double, orange-yellow flowers; 2 to 3 feet. **Pkt. 5c; ¼-oz. 25c**

**Double French.**—Flowers double, brown-red and golden-yellow; very rich and pretty. **Tall or Dwarf Mixed. Pkt. 5c; ¼ oz. 25c**

**MESEMBRYANTHEMUM**

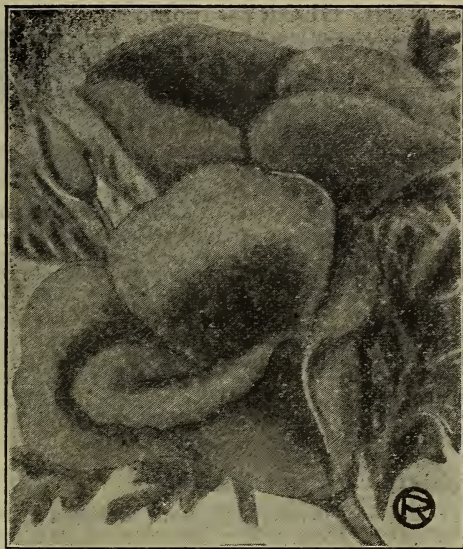
Dwarf trailing plants of great beauty, blooming the whole summer, thriving best in a dry, loamy or sandy soil; hardy annuals; 12 to 15 inches.

**Tri-color.**—Very dainty, pointed petaled, salmon-pink flowers. **Pkt. 10c**

**Crystallinum (Ice Plant).**—Flowers white; prized for its singular icy foliage. **Pkt. 5c**

**MIMULUS**

**Moschatus (Muskplant).**—A pretty, trailing plant with small yellow flowers, giving forth a musk-like fragrance; fine for hanging baskets, etc. **Pkt. 10c**



**Lobelia Flowers—Natural Size.**

**Mignonette—Reseda**

A universal favorite; very fragrant; no home garden is complete without Mignonette. It needs a cool soil only moderately rich; grows 6 to 12 inches high and is treated as a half-hardy annual; sown treated as a half-hardy annual. (See cut.)

**Grandiflora.**—Large-flowering, sweet, fragrant, spikes of greenish yellow color. **Pkt. 5c; oz. 15c**

**Defiance.**—Giant spikes; flowers abundant and very fragrant. **Pkt. 10c; ¼-oz. 25c**

**Machet Red.**—Excellent for pots or garden; highly colored, fragrant flowers. **Pkt. 10c; ¼-oz. 25c**

**White Pearl.**—New; the best white flower; very attractive. **Pkt. 10c; ¼-oz. 35c**

OUR 2-PAGE

LEAFLET,

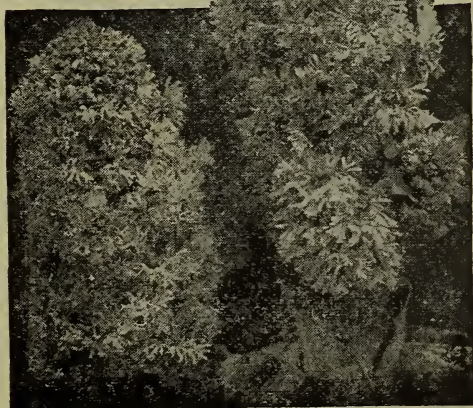
"HOW TO

GROW FLOW-

ERS FROM

SEED," FREE

ON REQUEST.



**Mignonette—Flower Spikes.**

**GLADIOLI BULBS** make a beautiful display when in bloom and are of the easiest culture and really not expensive, as they multiply rapidly. See page 90.



**MORNING GLORY—Ipomoea**

The tall varieties are popular, well known, rapid-growing climbers of the easiest cultivation; very fine for covering arbors, trellises, porches, etc.; the Minor or Dwarf varieties flower very freely and do not require support.

**Convolvulus Major.**—Tall, choice, single mixed; all colors. Pkt. 5c; oz. 20c

**Convolvulus Minor.**—Dwarf mixed. Pkt. 5c; oz. 20c

**Imperial Japanese Fringed.**—These have very large fringed flowers in a great variety of the most exquisite colorings; handsome foliage. Pkt. 5c; oz. 20c

**Japanese Double Mixed.** Pkt. 15c

**Choice Prize Mixture.**—This is a mixture of both American and Japanese varieties; very choice. Large Pkt. 10c; oz. 20c

(Note.—Soak the Japanese Morning Glory seed in warm water for 24 hours before planting.)

**Myosotis—Forget-Me-Not**

Few spring flowers are more admired than the lovely Forget-Me-Nots, which are especially effective when grown in masses. Perennials and hardy if given slight protection through the winter. Seed may be sown any time from spring till mid-summer. The Alpestris and Dissitiflora come into bloom in April, and are largely used for bedding or borders in connection with spring-flowering bulbs, Pansies, etc. The Palustris sorts do not bloom till May, but continue till fall. (Plants, page 80.)

**Dissitiflora.**—Rich blue; early flowers in fine sprays; 6 inches. Pkt. 10c; ¼ oz. 50c

**Alpestris Victoria.**—Of bushy habit; bearing large, double, bright blue flowers; yellow eye; very fine; 6 inches. Pkt. 10c; ¼-oz. 35c

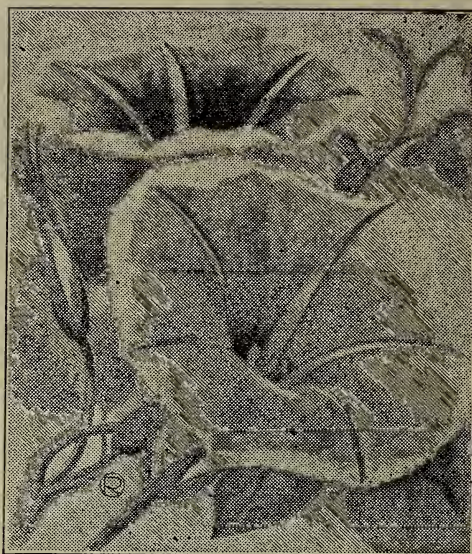
**Alpestris Royal Blue.**—Rich indigo blue. 9 inches. Pkt. 10c; ½-oz. 25c

**Finest Mixed.**—A mixture of blue, rose and white varieties. Pkt. 5c; ½-oz. 20c

**Palustris Semperflorens.**—Perennial; flowers bright blue; blooms from early spring until autumn. Pkt. 10c; ¼ oz. 50c



Myosotis—Forget-Me-Not.



Morning Glory.

**NEMESIA**

**Grandiflora Compacta Triumph.**—A very pretty, half-hardy, free-flowering annual; the plants grow about a foot high and the beautiful, dainty flowers are very varied in color, including rose, yellow, blue, orange, etc. An ideal bedding plant. Seed sown in the autumn makes beautiful pot plants for early spring blooming. Mixed Colors. Pkt. 15c

**NICOTIANA**

One of the easiest annuals to raise and one of the most effective. The blossoms in shape are not unlike a Petunia blossom but with a longer tube. The flowers open toward evening and emit a powerful perfume.

**Affinis (Tuberosc-flowered Tobacco).**—Delightfully sweet-scented, pure white, tubular flowers, blooming continually; annuals; 2 to 3 feet. Pkt. 5c; ¼-oz. 25c

**Affinis Hybrida.**—Splendid hybrids in blue, red and rose, etc., shades. ½-oz. Pkt. 10c

**Sanderae.**—A lovely hybrid Tobacco of elegant branching habit, and bearing on light graceful stems great quantities of very beautiful rosy carmine flowers; a valuable border plant, remaining decorative from summer to autumn. ½-oz. Pkt. 10c

**NIGELLA—Love in a Mist**

**Damascena.**—A compact, free flowering plant with finely cut foliage, curious looking flowers and seed pods; hardy annuals; blue and white; 1 foot. Mixed colors. Pkt. 5c; ¼-oz. 15c

**Miss Jekyll.**—A lovely variety with cornflower blue blossoms; splendid for cutting. Pkt. 10c; ¼-oz. 25c

**HOUSE PLANTS**

Don't overlook the beautiful Ferns and Palms that we offer on pages 76 and 77. The small sizes go safely by mail and are very pretty.





Nasturtium—Trailing.

For permanent and hardy climbing flowering vines and trailers, see pages 104, 105 and 106.

## Nasturtium—Tall Climbing

The most popular and most beautiful annual climbing vines. We offer only the finest strains, producing the largest and richest flowers.

**Asa Gray.**—Yellowish white; very fine.

**Black Prince.**—New; very dark.

**Crown Prince.**—Rich blood red.

**Golden Queen.**—Very fine yellow.

**Margaret.**—Yellow, spotted red and yellow.

**Primrose.**—Cream, brown spots.

**Regina.**—New salmon shade.

**Spitfire.**—Bright fiery scarlet.

Pkt. 5c; full collection, 8 kinds, 30c; per oz., any kind, 20c.

## DWARF NASTURTIIUMS

**Aurora.**—Reddish orange, veined carmine.

**Beauty.**—Yellow and scarlet; very pretty.

**Empress.**—Deep crimson; extra dark leaved.

**Golden King.**—A rich golden yellow.

**Regelianum.**—Deep purplish crimson.

**Vesuvius.**—New salmon red; very beautiful.

Price, all above Dwarf varieties, Pkt. 5c;

6 for 25c; per oz. 20c.

## PENTSTEMON—Beard Tongue

The handsome, brilliant flowers are borne on long terminal spikes, much resembling Gloxinias. Perennial; will bloom the first season if sown early; 3 feet. All colors from yellow to red and purple. See cut.)

Hybrida Mixed.

Pkt. 10c

**TALL PRIZE MIXTURE.**—This is undoubtedly the finest mixture of tall Nasturtiums offered anywhere; every shade is grown separately and then mixed.

Large Pkt. 10c; oz. 20c; ¼ lb. 50c; lb. \$1.50

**Tall Choice Mixed.**—A very fine selection of beautiful varieties.

Large Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. \$1.00

**IVY-LEAVED, FINEST MIXED.**—The ivy leaves, borne on very slender stems, are of a dark metallic color, which forms a striking contrast to the crimson scarlet flowers; an excellent variety for vases, hanging baskets, etc.

Pkt. 5c; oz. 20c

**VARIEGATED QUEENS.**—A new strain of tall Nasturtiums having beautifully variegated leaves; green, white and yellow; flowers large and of many bright colors.

Superb Mixed. Pkt. 5c; oz. 20c

## Dwarf Nasturtiums

**B. B.'s DWARF BEAUTY MIXTURE.**—Composed of new and rare sorts; exceedingly brilliant and beautiful.

Large Pkt. 10c; oz. 20c; ¼ lb. 50c; lb. \$1.50

**Choice Dwarf Mixed.**—Not equal to above, but far superior to most mixtures.

Large Pkt. 5c; oz. 15c; ¼ lb. 30c; lb. \$1.00

**GOLDEN MIDNIGHT (New Dwarf).**—A novelty of real merit. From an artistic point of view the contrast between the light foliage and extremely dark flowers is most remarkable. The foliage is light yellow, variegated, while the flowers are deep crimson, almost black, hence the name "Golden Midnight."

Pkt. 5c; oz. 20c



Pentstemon.

**GROW "PRIZE FLOWERS" by using "WONDER ODORLESS FERTILIZER." But do not use TOO MUCH, it is very RICH. See page 36.**



## Petunia

One of our easiest cultivated and freest flowering annuals. Will succeed almost anywhere and give a continuity of the most brilliant bloom from June till killed by frost. The strains we offer are the very choicest obtainable.



**Ruffled Giant Single Petunia.**

## Giant Pansies

This popular flower thrives best on a cool, moist, but well-drained soil enriched with well-rotted barnyard manure or fine ground bone. Seeds sown early will produce fine plants for summer blooming. The florist's method, though, is to sow in July or August and protect the plants during the winter, and they will flower continuously early the following spring and summer.

**EXHIBITION PRIZE MIXTURE.**—For variety of markings, beauty of form, large size, splendid texture this superb strain cannot be excelled. **Pkt. 20c; 1/8-oz. \$1.50**

**Steele's Mastodon.**—A superb strain. Flowers rare and rich in colors and of giant size; Oregon grown.

**Mixed, Pkt. 25c; 1/8-oz. \$1.50**

**Bugnot's Large Blotched.**—A magnificent strain; very large flowers; great diversity of colors. **Pkt. 20c; 1/8-oz. 75c**

**Cassier's Giant, Finest Mixed.**—Strong-growing strain, producing rich and varied-colored flowers of large size.

**Pkt. 15c; 1/8-oz. 75c**

**English Show Strain.**—A splendid strain, valued for the texture and varied markings of the flowers. **Pkt. 10c; 1/4-oz. 60c**

**Choice Mixed.**—A fine bedding strain. **Pkt. 5c; 1/4-oz. 50c**

## SINGLE PETUNIAS

**Ruffled Giants Prize Mixture.**—This strain produces in great profusion enormous flowers, having edges of petals beautifully ruffled and fluted; of great variety of colors, many being beautifully veined; very showy and attractive.

**Pkt. 35c; 1,000 seeds \$3.00**

**Dwarf, Large-Flowering, Fringed.**—A new dwarf selection of the most beautiful ruffled and fringed type; compact, free-flowering plants; excellent for bedding or pots. **Pkt. 25c**

**Large-flowered, Finest Mixed.**—Fine, large flowers in superb mixture. **Pkt. 10c**

**Fine Mixed.**—An assortment of medium-sized flowers; fine for bedding. **Pkt. 5c; 1/8-oz. 25c**

## DOUBLE PETUNIAS

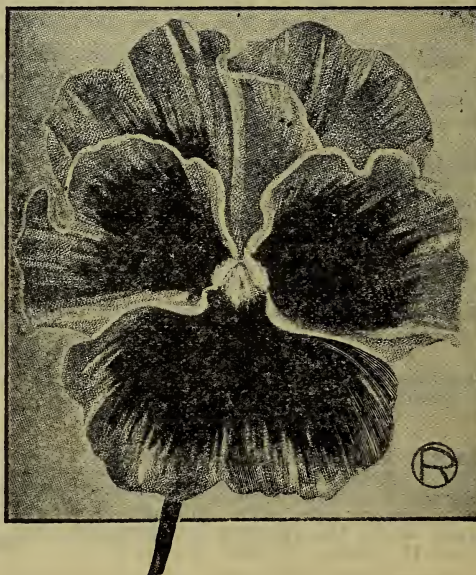
All of our Double Petunias are selected with greatest care, and contain as large a percentage of double flowers as it is possible to obtain.

**Giant Double, Finest Mixed Hybrids.**—An exceptionally fine strain; remarkable for the large, beautifully colored double flowers. **Pkt. 50c; 500 seeds \$4**

**Giant Double Mixed.**—Fringed, unsurpassed. **Pkt. 35c; 500 seeds \$2.50**

**Choice Double Mixed.** **Pkt. 25c; 500 seeds \$1.50**

OUR NEW PRODUCT, "C.M." DRY-KILN PULVERIZED COW MANURE is the ideal covering FOR SEED AND FLOWER BEDS. SEE PAGE 37.



**PLANTS.**—Large flowering, choice pansy plants, ready very early in the spring. Can be safely sent by mail. See page 75.



**PANSY—Continued**

**GIANT TRIMARDEAU.**—The most popular strain for this locality, and deservedly so, on account of the strong, sturdy plants and the enormous flowers of the greatest variety of colors.

**Finest Mixed.** Pkt. 10c; ¼-oz. 60c

**Masterpiece.**—Elegant ruffled petals; beautiful large flowers, mostly rich dark shades. Pkt. 20c; ½-oz. 75c

**GIANT NAMED PANSIES**

Full Collection, 9 Kinds 75c

**Adonis.**—Light blue; beautiful. Pkt. 10c

**Golden Queen.**—Pure rich yellow. Pkt. 10c

**King of Blacks.**—Best velvety black. Pkt. 10c

**Lord Beaconsfield.**—Very beautiful; violet purple, shading to white. Pkt. 10c

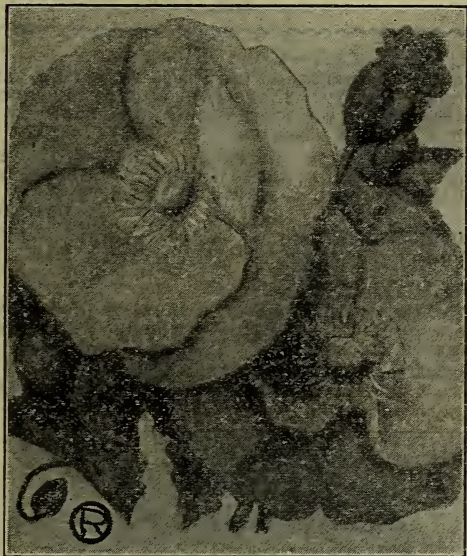
**Madam Perret.**—Fine wine red shades on white. Pkt. 10c

**Snowflake (Candidissima).**—Pure white. Pkt. 10c

**Sunlight.**—New yellow, orchid flowered. Pkt. 15c

**Purple-Eyed White.**—Very beautiful. Pkt. 10c

**Black-Eyed Yellow.**—Very fine and effective. Pkt. 10c



Shirley—Poppy.

**Poppy—Papaver**

Universal favorite of the easiest culture. They produce a wealth of the most beautiful and showy blooms. Both perennial and annual poppies bloom the first year from early-sown seed. Perennial varieties will, but annuals will not transplant safely, therefore sow the annuals where they are to remain and thin out, giving each plant ample room to grow and develop.

**King Edward.**—New annual of gorgeous coloring; deep scarlet shaded; each petal marked with a big black blotch; yellow anthers; flowers large and freely produced; 2½ feet. Pkt. 5c; ¼-oz. 25c

**Admiral (Annual).**—A single variety of surpassing beauty; large flowers of glistening white, with a broad band of brilliant scarlet around the top; produce a magnificent effect. Pkt. 5c; ¼-oz. 25c

**Miss Sherwood (Annual).**—Single, bears large flowers of a satiny white, shaded a silky chamois rose, a combination of rare delicacy. Pkt. 5c; ¼-oz. 25c

**Shirley (Annual).**—Charming Poppies. Flowers single and semi-double, and range in color from the purest white through the delicate shades of pale pink, rose and carmine to the deepest crimson and blood-red, while many are daintily edged and shaded. The petals are like silk. Free blooming and fine for borders or beds; 1½ to 2 feet. **Mixed.** Pkt. 5c; oz. 40c

**Carnation Flowered (Annual).**—Splendid double fringed flowers. **Mixed Colors.** Pkt. 5c; oz. 30c

**Annual Superb Mixture.**—A superior strain, containing the choicest of single and double varieties in all of the brightest colors. Pkt. 5c; oz. 40c

**ICELAND, OR NUDICAULE (Perennial).**—These are of a very graceful, neat habit, with bright green, fern-like foliage, formed in tufts, from which issue slender stalks, about 12 inches in height, bearing beautiful brilliant single flowers in endless profusion, and most useful for cutting. (For plants, see page 80.)

**Yellow, White, Scarlet.** Pkt. 10c  
**Single Mixed.** Pkt. 5c; ¼-oz. 35c

**Double Iceland Mixed.**—Very choice. Pkt. 15c; ½-oz. 50c

**ORIENTALE BRILLIANT.**—This is the most gorgeous perennial Poppy, flowering in June and July, with enormous vivid scarlet blossoms. Pkt. 10c; ¼ oz. 50c

**Oriental Princess Victoria Louise.**—Salmon pink; very silky and delicate. Pkt. 15c

**Oriental Psyche.**—Delicate rosy blush. Pkt. 15c

**CALIFORNIA POPPY.**—(See Eschscholtzia, page 55.)

PHLOX.—SEE NEXT PAGE.

PORTULACA.—SEE NEXT PAGE.

**Primula—Primrose**

The first two varieties named below are hardy, early-blooming, garden plants, and the others beautiful winter-blooming house plants. Their various forms and blending of colors are exceedingly pleasing and effective. They thrive best in a rich, loamy soil.

**POLYANTEUS (Veris Mixed).**—Early blooming, dwarf growing plants, valuable for outdoor bedding and edging, 8 inches, perennial. (See plants, page 74.) **Mixed.** Pkt. 10c; ½-oz. 25c

**VULGARIS (Veris Aurea).**—Yellow, common, English Primrose; hardy garden variety; perennial; 8 inches. Pkt. 10c; ½-oz. 35c

**Obconica Grandiflora Hybrids.**—A lovely, profuse bloomer, bearing beautiful clusters of single flowers; for pots only. Pkt. 15c

**Obconica G. Gigantia.**—New giant, distinct, very beautiful. Pkt. 25c

**Slaensis or Chinese Primrose.**—Beautiful, large, fringed flowers; especially fine for winter and spring flowers in the house; free bloomers. **Finest Mixed.** Pkt. 25c

**PYRETHRUM—Golden Feather**

**Aureum.**—Half-hardy perennials, grown as annuals; valuable for edging, as their yellow foliage makes a fine contrast with other bedding plants; 6 inches. Pkt. 5c

**THE "KIRK" SYSTEM.**—Read about this new way of applying FERTILIZER and SPRAYS WITH THE GARDEN HOSE. See page 38.



## Portulaca

Low-growing or creeping tender annual, six to eight inches high, and bearing glossy, cup-shaped blossoms in very brilliant and gorgeous colors. The foliage and stems are thick. The seed germinates slowly and should be started under glass or when the weather is hot. These flowers love the sunshine and do best on rather dry ground; excellent for embankments.

Single, Finest Mixed.

Double, Finest Mixed.

¼-oz. 20c; Pkt. 5c

½-oz. 50c; Pkt. 10c



Single Portulaca.

OUR  
HIGH  
QUALITY  
PLANTS  
AND SEEDS  
PLEASE.



Phlox Drummondii.

## Phlox

**Drummondii.**—These varieties are the largest flowering of the annual phloxes. They are the very finest strains that can be selected, and should be grown in everyone's garden; 12 to 15 inches.

**Alba.**—Pure white. Pkt. 10c; ½-oz. 25c

**Coccinia.**—Bright scarlet. Pkt. 10c; ½-oz. 25c

**Leopoldi.**—Rose, white eye. Pkt. 10c; ½-oz. 25c

**Grandiflora Mixed.**—All colors. Pkt. 5c; ¼-oz. 35c

**HARDY PERENNIAL PHLOX (Decusata).**—These rank among the finest herbaceous perennials for beds and borders; mixture of the finest colors; 3 feet. (See plants, page 81.) Pkt. 10c; ½-oz. 25c

**PINK.**—(See Dianthus, page 54.)

## Ricinus—Castor Oil Bean

A magnificent and highly ornamental plant, with picturesque foliage and stately growth, combined with brilliant colored fruit of the giant varieties. Grown as single specimens on lawns and on pleasure grounds, they form a striking feature; hardy annuals.

**Zanzibarensis, Mixed.**—Very ornamental; dark bronzy green and red leaves; 8 to 10 feet high. Pkt. 5c; oz. 20c

**Sanguineus Tricolor.**—Blood red stems, deep green leaves, with red veins; 6 feet. Pkt. 5c; oz. 20c

**Gibsoni.**—New dark red foliage; 5 feet. Pkt. 5c; oz. 20c

**Finest Mixed.**—All kinds. Pkt. 5c; oz. 20c

## RUDBECKIA—Cone Flower

**Bicolor Superba.**—Fine free-flowering annual variety; 2 feet; producing in great abundance on long stems its bright yellow double flowers. Pkt. 5c

**Fulgida.**—Hardy perennial sort, producing in masses during August and September brilliant orange-yellow flowers; 3 feet. Pkt. 10c

**Newmani.**—Perennial; large, bright orange-yellow flowers. Pkt. 15c

## SALPIGLOSSIS

Produces very showy, funnel-shaped flowers of large size; fine for beds; half-hardy annuals.

**Grandiflora Mixed.**—Large-flowering. Pkt. 10c



Ricinus (Castor Beans).

**HOW TO GROW FLOWERS FROM SEEDS.**—Our two-page leaflet gives full information and is free on request.





Salvia.

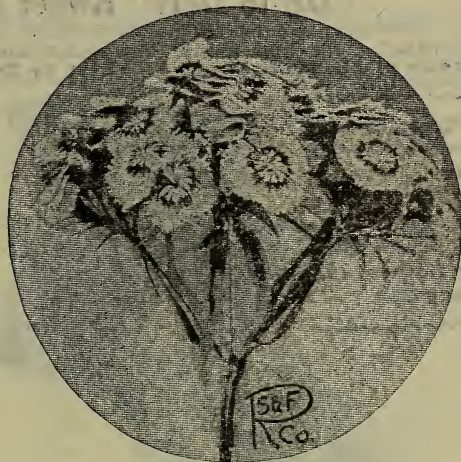
**Salvia—Scarlet Sage**

The Scarlet Sage has long been a favorite bedding plant, bearing long spikes of brilliant scarlet flowers in great profusion from July till frost; seed should be sown as early as possible, either indoors or in a hotbed, and the young plants transferred to their flowering quarters when the weather has become settled and warm.

**Splendens Compacta.**—A splendid showy variety, with large spikes of bright rich scarlet flowers; 3 ft. Pkt. 10c; ¼-oz. 50c

**Zurich.**—New dwarf, of special merit; very early. Brilliant, free flowering; 15 to 18 inches. Pkt. 15c; ½-oz. 75c

**Bonfire.**—Of dense compact growth; useful for bedding or borders. Flowers dark scarlet, on spikes which stand clear of the foliage and attract attention at once; 2 ft. Pkt. 10c; ½-oz. 65c



Sweet William

**SCHIZANTHUS—Butterfly Flower**

Beautiful garden annuals; flowers charmingly fringed and delicately colored; 1 to 2 feet. Blooms quickly from seed.

**Grandiflora Mixed.**

Pkt. 10c

**Stock—Gilliflower**

By far one of the most popular annuals for garden or greenhouse culture. They are superb for cutting, and are of great value to florists for bouquet work. Flowers are of delicious fragrance, large, double, and borne on handsome spikes.

**LARGE-FLOWERED TEN WEEKS.**—A splendid double-flowered strain, especially adapted for bedding and pot culture; pyramidal spikes of brilliantly colored flowers; 1 foot.

**Finest Mixed.**

Pkt. 10c; ½-oz. 50c

**GIANT PERFECTION, OR CUT-AND-COME AGAIN.**—Grown for us in Europe, where the greatest possible care is taken in the selection of good seed. Of branching habit, 1½ feet, and 85 to 90 per cent of large, double flowers; fine for cutting.

**White, Light Blue, Crimson, Dark Blue, Pink, Yellow, or Finest Mixed.**

Pkt. 10c; ½-oz. 60c

**BEAUTY OF NICE.**—A handsome, new winter stock of quick growth; flowers of large size; 2 feet.

**Mixed.** Pkt. 10c; ½-oz. 60c

**Princess Alice.**—Double white. Pkt. 15c

**Queen Alexandra.**—Soft rosy lilac. Pkt. 15c

**Beauty of Nice.**—Delicate flesh pink. Pkt. 15c

**SUNFLOWER.**—(See Helianthus, page 57.)

**Sweet William**

Hardy biennial, widely grown for the handsome, showy heads of brilliant flowers from June to September; 1½ feet.

**Double Finest Mixed.** Pkt. 10c  
**Mammoth Single Mixed.** Pkt. 5c



Stocks.

**PERENNIAL FLOWERS** are rapidly gaining in favor. **MORE** should be planted; they are beautiful in borders, beds or among shrubbery, and flower each year. See pgs. 78 to 83.



## "Up-to-Date" Sweet Peas of "Highest Quality"

This year we have "new novelties" to offer of special merit. We have discarded the "Unwin" class and many "Spencers" and Grandiflora types, and we offer you only the Cream of all Sweet Peas. The Best by Test.

Treat your Sweet Peas with **NITRO-GERM**, makes stronger vines, more and larger flowers. (See page 35.)



### FIERY CROSS

Burpee's latest. The beautifully waved and fluted flowers are borne freely in threes and fours, well placed on long stout stems. Color, a scorching fire-red, or scarlet, without any shading and which scintillates and glitters in bright sunlight, thus adding a glowing fire-like sheen which radiates over the flower.

Pkt., 30 seeds, 25c

### YARRAWA

New. Claimed to be the forerunner of a new class of "early flowering Spencers" of value more especially, to the commercial florist, for winter forcing. Planted inside or outdoors it blooms very early and continuously. Flowers large, exquisitely waved and almost double; color, bright rosy pink on cream.

Pkt., 15c; 1/4-oz. 50c

## 1917 Prize Collection

**LATEST and BEST SPENCERS.**  
**RARE, RICH and WONDERFUL.**

**SPECIAL**—Collection price, 10 lovely kinds (value \$1.15), **ONLY 85c**

**POSTPAID**, including leaflet.  
"How to Grow Prize Sweet Peas"—  
1 oz. of Each Variety, \$3.00

### KING WHITE

Well and truly named, it certainly is "the king" of all white sweet peas. In color, size and beauty of flower, length of stem and vigor, King White is unsurpassed.

Pkt. 10c; oz. 35c

### HERCULES

A magnificent soft rose-pink self, of truly giant proportions, undoubtedly the best true, pure pink. A flower of great substance; broad, spreading and beautifully waved. Plants extremely vigorous, continuous and profuse in bloom. Flowers generally borne in fours, upon long, stiff stems. This unique novelty must be included among the best dozen varieties in cultivation.

Pkt. 15c; oz. 50c

### ILLUMINATOR

Very distinct and pronounced "the most glorious color ever seen"—rich glowing cerise-salmon, suffused bright orange, rich and glistening, large, perfect flowers in profusion on long stems.

Pkt. 10c; oz. 35c

### MRS. CUTHBERTSON

An exquisitely beautiful bi-color of gigantic size and advanced Spencer type. Standard, clear rose-pink, wings white. Flowers invariably produced four on a stem of great length. Vigorous and free flowering.

Pkt. 10c; oz. 35c

### MRS. TOWNSEND

A splendid picotee variety. The ground color is white, having a beautifully clear wire-like picotee edge of blue around both standard and wings. The large flowers are nicely waved. Magnificent for bunching.

Pkt. 10c; oz. 35c

### THOMAS STEVENSON

The flowers, of largest size and finest Spencer type, are of an intense flaming orange throughout. A grand exhibition variety. Unsurpassed in color and beauty.

Pkt. 10c; oz. 35c

### R. F. FENTON

Undoubtedly the best of the lavender varieties, grand for exhibition and garden decoration; strong grower, gives plenty of fours. The individual flowers are very large and refined; the color is a rich clear lavender. All keen growers will include this variety in their collection. A. M., R. H. S.

Pkt. 15c; oz. 50c

### MARGARET ATLEE

This new, charming variety is one of the finest pink yet introduced. The giant flowers are rich, rosy salmon pink on creamy buff, a bright yet delicate pink, immense wavy standards and wings inclined to double.

Pkt. 15c; oz. 50c

### GEORGE STARK—A Prize Winner

Giant flowers of perfect form, waved and fluted. Color, bright pure scarlet throughout and absolutely sunproof.

Pkt. 10c; oz. 35c

### WINNIFRED DEAL

A most beautiful variety; pure white with a very distinct picotee-edge of rose-pink. The general effect is light and dainty.

Pkt. 10c; oz. 35c

Join the **Oregon Sweet Pea Society** and compete for some of the valuable prizes offered annually. Write President J. H. Dundore, care Sherman-Clay & Co., Portland, Ore., for premium list, etc. Dues and entry fees 50c per year.



## Up-to-Date Spencer Sweet Peas of Real Merit—Continued

No seed house offers a more select list. We classify under colors for your convenience.

**SPECIAL**—Make up your own collections, 65c worth for 50c; \$1.35 for \$1.00.

### WHITE

**CONSTANCE HINTON.**—A new, black seeded, hardy variety claimed to be the largest White Spencer Sweet Pea. The bud opens tinted with pink, but as the flower develops the pink fades out, leaving a beautiful large, pure white. Strongly recommended as an exhibition flower.

Pkt. 15c; oz. 50c

**ETTA DYKE.**—One of the largest and most exquisitely formed pure white Spencers. Beautifully waved; color absolutely pure.

Pkt. 10c; oz. 40c

**KING WHITE.**—See "Novelties," page 66.

**NORA UNWIN.**—Pure white and large in size; exquisitely crinkled, wavy petals.

Pkt. 5c; oz. 20c

**WHITE SPENCER.**—A pure white, of enormous size and splendid substance; long, strong stems; very popular.

Pkt. 10c; oz. 25c

### YELLOW-PRIMROSE

**CLARA CURTIS.**—The best light cream in color and size. Wavy and free.

Pkt. 10c; oz. 25c

**DOBBIE'S CREAM.**—We consider this the best deep cream or primrose-colored variety; nicely waved, abundance of four-bloom sprays, and most floriferous. Strong and vigorous.

Pkt. 10c; oz. 35c

**PRIMROSE SPENCER.**—A pronounced primrose or creamy white; excellent flower.

Pkt. 10c; oz. 25c

### PINK ON CREAM

**ETHEL ROOSEVELT.**—A soft, pleasing primrose, overlaid with dainty bright pink; very large and fine.

Pkt. 10c; oz. 35c

**MARGARET ATLEE.**—See "Novelties," page 66.

**MAY CAMPBELL.**—A most distinct sweet pea; ground color cream, shaded and slightly veined light pink.

Pkt. 10c; oz. 35c

**MRS. HENRY BELL.**—Giant flowers of finest form. A most charming rich pink on cream. Magnificent in every respect.

Pkt. 10c; oz. 35c

### LIGHT PINK

**CONSTANCE OLLIVER.**—A refined variety of great beauty and form; rich, rosy delicate salmon pink; charmingly waved and crimped. The large, beautiful flowers, usually in fours are well placed on long, strong stems.

Pkt. 10c; oz. 30c

**ELFRIDA PEARSON.**—A magnificent and a very large pale pink flower of a lovely shade. A vigorous grower, producing plenty of fours. This pea should be grown by every exhibitor.

Pkt. 10c; oz. 35c

**MRS. HUGH DICKSON.**—The best light pink to date. A European variety of sterling merit. You will be delighted with this.

Pkt. 10c; oz. 35c

**MRS. ROUTZAHN.**—A lovely combination of apricot and pink. Beautiful, large wavy flowers. Praised by all who have grown it.

Pkt. 10c; oz. 25c

Don't grow your Sweet Pea Vines too close together, after the plants are 4 inches high, thin to 4 to 6 inches apart.

**Free**—Our pamphlet, "How to Grow Prize Sweet Peas"—free with any order if asked for.

### PINK

**HERCULES.**—See "Novelties," page 66.

**COUNTESS SPENCER.**—Improved strain. Flowers extremely large, beautifully expanded, crumpled and waved. Color soft shell pink, deeper at the outer edges. True pure seed.

Pkt. 10c; oz. 35c

**MRS. A. IRELAND.**—The form is most beautiful; petals waved and crinkled; distinct serrations on edges of standard. The extra large long-stemmed flowers are most attractive; the best rosy pink.

Pkt. 10c; oz. 35c

### LAVENDER

**ASTA OHN SPENCER.**—Color a beautiful lavender; flowers large, wavy and generally come four blossoms to the stem. We offer a very select strain.

Pkt. 10c; oz. 25c

**FLORENCE NIGHTINGALE.**—Giant flowers on long stems; bluish lavender.

Pkt. 10c; oz. 40c

**FLORA NORTON SPENCER.**—A beautiful shade of light blue or lavender; very desirable.

Pkt. 10c; oz. 35c

**R. F. FENTON.**—See "Novelties," page 66.

**WEDGEWOOD.**—Flowers bright silvery blue in color and of fine large full wavy form, some duplex. Might be called a pure lavender, and will surely become very popular.

Pkt. 10c; oz. 40c

### ORANGE AND SALMON

**NOTE.**—To get the most delicate shade in this color, flowers should be lightly shaded.

**BARBARA.**—Salmon-colored self of large size. It makes a "telling" bunch either for exhibition or table decoration, and is most effective.

Pkt. 15c; oz. 60c

**DECORATOR—1913.**—The color is old rose with a sheen of terra cotta giving a bright orange effect. The placement and poise of the flower is perfect. When exhibited this variety never fails to attract attention.

Pkt. 10c; oz. 40c

**EDROM BEAUTY.**—This grand variety is a fine orange-salmon colored flower. It is an excellent grower, producing fours in abundance.

Pkt. 10c; oz. 40c

**HELEN LEWIS SPENCER.**—A very profuse bloomer. Flowers large, nicely waved and of an intense rich crimson-orange or salmon pink.

Pkt. 10c; oz. 35c

**ILLUMINATOR.**—See "Novelties," page 66.

**THOS STEVENSON.**—See "Novelties," page 66.

Skagway, Alaska, Mar. 23, 1916.

Routledge Seed & Floral Co.

Gentlemen: Enclosed find small order. Please send leaflet for growing Spencer Sweet Peas. The Peas bought from you last year grew to the height of 12 feet and we had 47 different varieties. They were surely very beautiful.

Yours truly,  
MRS. GEO. R. DEDMAN.

**QUALITY and TRUENESS** is what makes the price in Sweet Peas. Low prices never brought "HIGHEST QUALITY" Seeds. Use Nitro-Germ, see page 35.



## Up-to-Date Spencer Sweet Peas of Real Merit—Continued

No seed house offers a more select list. We classify under colors for your convenience.

**SPECIAL**—Make up your own collections, 65c worth for 50c; \$1.35 for \$1.00.

### SCARLET—CRIMSON

**GEORGE STARK.**—See "Novelties," page 66.

**KING EDWARD SPENCER.**—Of vigorous growth, profuse bloomer, giant flowers; most popular scarlet; long stems.

Pkt. 10c; oz. 35c

**MARIE CORELLI.**—Rosy carmine, tinted cherry red; beautifully waved. Award of merit; very distinct.

Pkt. 10c; oz. 35c

**MAUD HOLMES.**—An English introduction and superior to many in this color. Elegant form and type and a beautiful crimson scarlet, giant, wavy flowers, four to a stem.

Pkt. 10c; oz. 40c

**THE PRESIDENT—1916 Novelty.**—Flowers of beautiful wavy form on long stems usually carrying four giant blooms of a rich glowing scarlet—claimed to be one of the brightest colors to date and does not burn.

Pkts. (10 Seeds) 15c

**VERMILLION BRILLIANT.**—Flowers not very large but the most "brilliant scarlet" sweet pea to date.

Pkt. 10c; oz. 35c

### BLUE—PURPLE

**CAPTAIN OF THE BLUES, SPENCER.**—Clear purple, blue; a bright striking color.

Pkt. 10c; oz. 25c

**MRS. G. CHARLES.**—A new shade of deep blue, large wavy flowers of excellent form.

Pkt. 10c; oz. 35c

**NEW MARGARET MADISON.**—An exceedingly chaste variety of unsurpassed beauty. The flowers are a clear azure-blue self,—a color that always attracts and is so effective in bouquets or boutonnières. Awarded Certificate of Merit by the American Sweet Pea Society.

Pkt. 15c; oz. 50c

**ROYAL PURPLE.**—A recent novelty of great merit. A true, rich, royal purple that holds its color. Flowers of giant size and elegant form, very beautiful bunched with white.

Pkt. 15c; ½ oz. 50c

### DARK RED—CLARET

**ARTHUR GREEN.**—Magnificent, of largest size and distinct shade. The general color effect is that of dark claret.

Pkt. 15c; oz. 40c

**OTHELLO SPENCER.**—The stems are strong and long, with three or four fine, very large blooms of a rich deep maroon.

Pkt. 10c; oz. 25c

### PICOTEE—BICOLOR

#### Shaded and Striped

**AMERICA SPENCER.**—Bright and attractive; white, striped bright red; very pretty.

Pkt. 10c; oz. 35c

**MARTHA WASHINGTON.**—A beautiful large, wavy flower, almost pure white, edged carmine rose, very dainty and effective.

Pkt. 10c; oz. 35c

**MRS. CUTHBERTSON.**—See "Novelties," page 66.

**MRS. TOWNSEND.**—See "Novelties," page 66.

**SENATOR SPENCER.**—Claret and chocolate stripe, on light ground, large and most distinct, much admired; a profuse bloomer.

Pkt. 10c; oz. 35c

**VEILED BRIDE.**—Ivory white, beautifully marbled with dainty pink, large, free flowering and very choice.

Pkt. 15c; oz. 50c

## Popular and Best Grandiflora Sweet Peas

Aside from the preceding varieties these are the "cream" of over 100 named varieties. Your selection, pkt. 5c; 8 pkts. for 30c; oz. 10c; 8 1-oz. pkts. 60c; ¼-lb. 30c; lb. \$1.00.

**DOROTHY ECKFORD.**—A good white of the largest and best grandiflora type. A free bloomer.

**MRS. COLLIER.**—A rich primrose tint, entirely free from any trace of pink.

**LOVELY.**—Beautiful shades of soft shell pink, changing to very light rose at the outer edges.

**KING EDWARD VII.**—Large flowers of open form, bright crimson-scarlet. Long stems; fine flowers.

**HENRY ECKFORD.**—A bright, soft flaming orange, deepening slightly in the center. Large and beautiful.

**AMERICA.**—Heavily striped with bright red on silvery white ground.

**LADY GRISEL HAMILTON.**—A grand, pale lavender. Planted extensively by florists.

**LOED NELSON (Brilliant Blue).**—Very large, slightly hooded, the most desirable blue.

Roseburg, Ore., Nov. 20, 1915.

Gentlemen: "My Rose City Mixture" was so pretty last year that I want to try them again. Everyone admired my Sweet Peas.

Yours truly,

MRS. LAWRENCE CANFIELD.

## Rose City Mixture of Grandiflora

Extraordinary care has been taken in the selection of the varieties and the quantities of each to make up the mixture, and the result is one that cannot fail to excite the admiration of even the most critical.

Large pkt. 5c; oz. 10c; ¼-lb. 25c; lb. 85c

## Winter Flowering (Forcing)

For florists' use for forcing in green-houses for winter flowers. All leading colors in named varieties at 20c oz.; 4 ozs. 50c.

## Cupid Sweet Peas

Compact dwarf plants, not over six or seven inches high. Flowers of good size and substance. For edgings, low beds and pot culture they are unique and pretty.

Mixed, Pkt. 5c; oz. 15c; ¼-lb. 40c; lb. \$1.25

No Seed Company in the world offers better sweet pea seed than we. By field trials of the improved varieties from American and European growers we are enabled to select the best under each color for our customers.



## Sweet Peas of Highest Quality

Some others may have as good, but none any finer Sweet Pea Seed than we. The new orchid-flowered or **Spencer types** are the latest, and well worth the higher price asked. Those who have tried the true "new Spencers" will never be satisfied again with the old types.

### Routledge Special Our 1917 Collection of

#### 7 Giant Spencers

#### 75c Collection for 50c

We have put up, in one large, beautifully lithographed envelope, seven distinct and new **Giant "Spencers"**; each kind in a separate packet and properly marked. The seed in each packet will plant a row 3 to 4 feet or a total of 20 to 30 feet. With good care and cultivation these will produce **thousands of blooms** which you can pick in separate shades; an ideal way for special effect.

This collection contains our leaflet "**How to Grow Prize Sweet Peas**," and one full-sized packet of the following distinct and popular colors:

**Etta Dyke**—Giant, wavy, pure white.  
**Elfrida Pearson**—Lovely pale pink.  
**Barbara**—Magnificent salmon shade.  
**King Edward Spencer**—Giant scarlet.  
**May Campbell**—Exquisite cream pink.  
**Marie Corelli**—Rosy crimson-cherry.  
**Florence Nightingale**—Clear lavender.

**Note.**—For full description see classification under "separate colors," pages 67-68.

Add 15c Extra or 65c in all and we will include a 25c packet (1 oz.) of **R. R. Superb Spencer Mixture**. (Described below.)

Use **NITRO - GERM** for Sweet Peas, 25c and 50c sizes. (See page 35.)

### **R. R.'s Superb Mixture of Giant Spencer Sweet Peas**

This is our own special mixture and is composed only of the best giant orchid-flowering wavy Spencer varieties, also contains some new seedlings of promising merit, that have not as yet been named. For healthy, robust growth, wealth of blooms, size of flowers and exquisite and rare colorings, this mixture is unequalled.

Put up and for sale in sealed packages only, 1/2-oz. pkts., 15c; oz. pkts., 25c each; 3 for 60c; 6 for \$1.00.

Seaside, Ore., Feb. 16, 1916.

Gentlemen: I have grown Sweet Peas from your seed the past two years, and have had splendid success, some of them reaching a height of 13 feet.

Very respectfully,

E. S. ABBOTT.

Ridgefield, Wash., Mar. 17, 1916.

Gentlemen: My sister took the prize on your Sweet Peas last year, so I would like to try them.

Yours truly,

MRS. W. E. CHANDLEE.

Snohomish, Wash., Aug. 14, 1916.

Routledge Seed & Floral Co.

Dear Sirs: I am indeed proud of all the flowers I got from you, everything is fine. My porch boxes and hanging baskets are indeed beauties and the two "Portland" Cannas are just lovely, also the Phlox.

My Sweet Peas, just think, are 14 feet high, and the **LARGEST** and **FINEST FLOWERS** on them I ever saw. I am very much pleased with everything and thank you for all.

Respectfully,

MRS. OTTILIE McDONALD.

**PRIZE SWEET PEAS**—If you want to grow giant flowers on long stems, you must give your sweet peas good soil, plenty of water at the roots in dry weather, some Wonder Fertilizer, and pick the flowers often. Our "leaflet" tells all—free with each order. Use "C. M." in the Sweet Pea trench. See page 37.



**SCABIOSA—Morning Bride**

Elegant, hardy annual; fine for cutting and bedding; flowers quite large and very showy, blooming freely during summer and autumn; 2½ feet. All colors.

**Finest Mixed.** Pkt. 5c; ¼-oz. 25c

**White.**—Large flowers. Pkt. 5c; ¼-oz. 25c

**SHAMROCK—True Irish**

This is the genuine Shamrock, and is gathered by a connoisseur on the native land. Pkt. 25c

**SNAPDRAGON.**—(See *Antirrhinum*, pg. 49.)

**SMILAX**

One of the most graceful climbers for greenhouse or conservatory. Pkt. 10c

**THUNBERGIA**

Extremely pretty yellow flowers with dark eye; rapid-growing annual trailers; used largely for vases, window boxes, etc; will flower all summer till frost; 5 feet.

**Finest Mixed.** Pkt. 5c; ¼-oz. 30c

**TRITOMA—Red Hot Poker**

Striking and exceedingly ornamental autumn flowering plant. Showy flower spikes, shaded red and yellow; 2 feet. (See cut and plants, page 82. Pkt. 10c

**VALERIANA—Garden Heliotrope**

A fine old-fashioned hardy plant; flowers have a strong heliotrope odor; showy, red or white; fine for bouquets; 2 feet.

**Mixed.** Pkt. 5c

**Verbena**

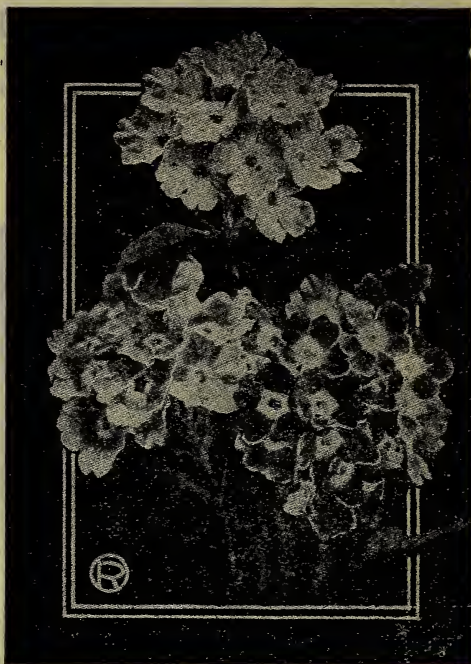
One of the finest annual bedding plants and also suitable for borders, baskets and window boxes; its heads of brilliant-colored flowers produce one mass of bloom throughout the summer. (See cut.)

**NEW GIANT.**—The most beautiful and remarkable variety yet introduced.

**Hybrida Mixed.** Pkt. 20c



Zinnia.



Verbena.

**MAMMOTH.**—A carefully selected and improved strain. The trusses and individual flowers are of the largest size, of brilliant colors; free blooming and of vigorous habit.

**White, Scarlet, Rose, Purple, or Mammoth Mixed.** Pkt. 10c; ¼-oz. 50c

**Fine Mixed.**—A choice mixture. Pkt. 5c; ¼-oz. 25c

**Violet**

*Viola Odorata* is the well-known English Violet, a free-flowering, hardy perennial; easily grown from seed, though somewhat slow in germinating; succeeds best in partially shaded, moist places.

**Odorata.**—Blue or White. Pkt. 15c

**WALLFLOWER**

Very highly prized, old-fashioned plants, grown largely for their fragrance; half-hardy perennial varieties; 1½ feet.

**Single Finest Mixed.** Pkt. 5c

**Double Tall Branching, Finest Mixed.**—Fragrant; 3 feet. Pkt. 10c

**WILD CUCUMBER.**—(See *Echinocystis*, page 55.)

**Zinnia—Youth and Old Age**

The plants come quickly from seed and make a fine display in a bed or border. Each flower lasts for several weeks, and the plants bloom abundantly until destroyed by frost; 2½ and 3 feet; annual.

**ROBUSTA GRANDIFLORA.**—A very choice selection of the largest showy varieties.

**Double Mixed.** Pkt. 10c; ¼-oz. 40c

**MAMMOTH.**—White, Golden, Yellow, Scarlet or Flesh; 3 feet. Pkt. 15c; ¼-oz. 50c

**Tall Giant, Double Mixed.**—Elegant strain, comprising all colors; 3 feet.

Pkt. 5c; ¼-oz. 25c

**Dwarf Double Mixed.** Pkt. 5c; ¼-oz. 25c

**REMEMBER** our **DESCRIPTIVE CATALOG OF NURSERY STOCK** gives full information and prices on the best **FRUIT, SHADE AND ORNAMENTAL TREES, SHRUBS AND PLANTS.** Free to all.



## BEAUTIFUL WINTER AND SPRING FLOWERING HOLLAND BULBS



Potted Hyacinth.

We import in carload lots from the best growers in Holland a complete stock of Dutch Bulbs. These generally arrive here in October and are planted any time from then until early spring, either in pots inside or outdoors in beds. Perfectly hardy, freezing after planting does not injure.

**COMPLETE BULB CATALOG FREE ON REQUEST.** It gives full information and is issued September 1 each year.

**April 1st Latest Date.**—Do not order these bulbs after April 1st, as all remaining stocks are sold or planted by April 5th.

Pamphlet "HOW TO GROW BULBS" free with each order.

### HYACINTHS

One of the most popular and beautiful spring flowering plants for indoor and outdoor decorations. For pots, porch or window boxes and the open ground they are unexcelled. Bright, cheerful and fragrant.

|                                  | Each   | Doz.   |
|----------------------------------|--------|--------|
| <b>Prices Postpaid.</b>          |        |        |
| First Size Named, any color..... | \$ .10 | \$1.00 |
| Mixed Bedding, any color.....    | .06    | .65    |
| Dutch Romans, and color.....     | .05    | .50    |

### TULIPS

No other flower excels the Tulip in beauty of form, brilliancy of color, effective bedding and gorgeous show. They are very desirable for garden beds or borders as well as for window or porch boxes. For pot culture indoors the single early kinds only, do well.

**Single or double Named Varieties, any color.**

**Good mixture of single or double varieties.**

**Single Late Flowering.** Three weeks later.

**Darwin Tulips.** Late, large, tall stems. Mixed.

**Doz., 30c; 100, \$2.00**

**Doz. 25c; 100, \$1.50**

**Doz., 40c; 100, \$2.50**

**Doz., 50c; 100, \$3.50**

### NARCISSUS OR DAFFODILS

The Narcissus affords perhaps more pleasure and satisfaction than any other flowering bulb. They are very beautiful, very hardy, bloom freely, are delicately fragrant, thrive in almost any soil, and last for years without resetting. The flowers are beautiful and graceful with a variety of color combinations, and many are delightfully fragrant. Culture same as Hyacinths.

**Single or Double Named Varieties, Separate.**

**Each, 5c; doz., 40c; 100, \$2.75.**

**Good Mixture of Single or Double or both varieties.**

**Doz., 30c; 100, \$2.00**



Chinese Sacred Lily.



Single Tulips.

### CHINESE SACRED LILY

The fragrant flowers are of a satiny white color, with golden yellow cups. These lilies produce a profusion of bloom in an incredibly short time, usually not more than six weeks from the time of planting. This splendid flower increases in popularity every year.

**Culture.**—Usually grown in water. Put an inch or two of gravel in a dish, set the bulbs on this, and put enough fancy pebbles, gravel or shells around them to keep them from falling over; fill the dish with water and set in a dark closet for a few days, until the roots start freely, then bring them to the light.

**POLYANTHUS NARCISSUS.** These belong to the same class as above and do well under same culture. **White, Yellow, or White with Orange cup.**

**Collection 4 kinds, 25c; doz., 60c**

### CROCUS

These bright, charming little flowers bloom very early in the spring, which makes them most welcome. Very hardy and flower from year to year.

**Giant Named, White, Purple, Yellow or striped.**

**Dozen, 20c; 100, \$1.50**

**Mixed, White, Yellow, Purple, Striped.**

**Dozen, 15c; 100, \$1.00**

**FOR OTHER DUTCH BULBS.**—Such as Snowdrop, Ixias, Sparaxis, Anemones, Cyclamen, Ranunculus, Grape Hyacinths, etc., ask for Bulb Catalog.



## FLOWERING PLANT COLLECTIONS

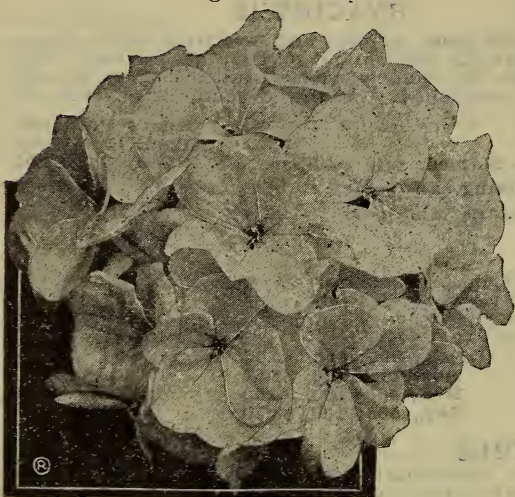
On this and the two following pages we offer plant collections grown especially for our out-of-town customers. All orders for these plants are sent direct to the greenhouse where they are gathered, packed and wrapped with special care so they will travel in safety by parcel post. Every plant is carefully labeled.

### Jacquerie Collection Single Geraniums

Price 10c each; set of 12 varieties, \$1.00 postpaid.

**Bellerophon.**—One of the freest blooming single scarlet bedding varieties; rich, glowing scarlet, crimson maroon shading on upper petals.

**C. W. Ward.**—Rich salmon shaded to orange. Large trusses on strong stalks. Magnificent zoned foliage.



Single Geranium.

**Juste Oliver.**—Large trusses of flowers of a rich carmine-lake shade. Very distinct.

**Jacquerie.**—Rich, vivid crimson; immense trusses. Excellent for bedding; blooms freely, stands the sun well.

**Mad Chapotan.**—Beautiful pink upper petals, marked with white; very pretty.

**Mildred Rival.**—Pure rose-pink, with conspicuous white blotch on two upper petals; flower beautifully formed, and the largest of its color.

**Maxine Kavolenski.**—Odd shade of orange red; very distinctive, splendid bedder, vigorous, handsome, a dependable sort.

**Mrs. E. G. Hill.**—Very large trusses; color, clear salmon, with a white center; one of the finest varieties.

**Mrs. J. M. Garr.**—A grand single white; plants a mass of white bloom.

**Mrs. A. Blanc.**—Silver salmon, shaded peach; glistening texture.

**Mme. Cibiel.**—Light salmon flesh color bordered orange. Grand trusses of very large florets.

**Nuit Poitevine.**—Fine, large flowers, lower petals rich violet, bordered with scarlet, upper petals orange scarlet, very distinct.

### La Favorite Collection Grand Double Geraniums

Price, 10c each; set of 12 varieties, \$1.00 postpaid.

**Alfonse Ricard.**—Rich velvety scarlet; extra large and brilliant.

**Beaute Poitevine.**—Very large semi-double flowers of a brilliant salmon color.

**Contraste.**—Glowing carmine shaded to velvety scarlet. One of the best bedding sorts.

**Francois Magnard.**—Fine, bright magenta shade, flowering very freely.

**Francis Perkins.**—The grandest bright pink bedding variety to date, exquisite.

**Jean Viaud.**—Soft rose color shaded to white. Immense florets in large trusses. Magnificent variety.

**La Favorite.**—Trusses very large; flowers pure snow white; a favorite.

**Marquis de Castellane.**—Rich solferino color. Immense trusses on strong stalks. Robust grower and very free blooming.

**S. A. Nutt.**—The best of the rich, dark crimson varieties; very popular.

**Mrs. Lawrence.**—Lovely satiny pink shaded to white. Its delicate color is delightful. A grand bedding variety.

**Madame Landry.**—Rich bright apricot, shaded with orange, very large trusses. One of the best.

**Susanne.**—Large trusses of snowy-white flowers each floret distinctly bordered with pink. Very striking.

### Lady Washington Collection English Show Pelargoniums

These are commonly known as Lady Washington Geraniums. Like geraniums they flower during the summer months and are very ornamental either as house or bedding plants.

Price, 20 cents each; set of 6 sorts, \$1.00.

**Countess.**—Very large flowers of a distinct shade of cerise salmon color; upper petals splashed with maroon.

**Crimson King.**—Superb dark colored variety. Flowers rich crimson, blotched and feathered maroon. Very free flowering and easy growing.

**Easter Greeting.**—A new free blooming variety of the greatest merit. Flowers amaranthe red with a well outlined maroon blotch on each petal. Blooms very large and in good sized trusses.

**Mabel.**—Delicate light pink, upper petals feathered and blotched maroon. Elegantly fringed flowers of great substance.

**Madam Vibert.**—Of very sturdy growth, bushy habit and free blooming. Flowers bright red, blotched black and maroon and edged with light pink and white. One of the most admired.

**Vivid.**—Flowers very large and full with crisp, waxy petals. Color rich crimson of great brilliancy.

**USE "WONDER."**—The best Fertilizer and plant food known. A teaspoonful to a plant does wonders. See page 36.

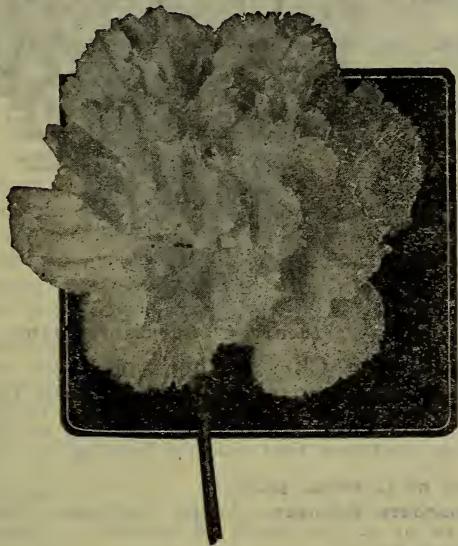


## Ever-Blooming Carnations

For beauty, fragrance and abundance of flowers, for its hardiness, easy culture and adaptability to outdoor or indoor cultivation, no plant excels the ever-blooming Carnation, or, as so frequently called, the Pink; rivaling the Rose in beauty of colors and shades, equalling in perfume and even excelling it in profusion of flowers.

### Princess Collection Giant Carnations

Price, 20c each; set of 7 sorts, \$1.00 postpaid.



**Bella Washburn.**—Flowers large, with finely fringed petals. Strong stems holding the flowers erect. Color, rich dazzling scarlet. A true ever-bloomer.

**Gorgeous.**—A giant among Carnations. Flowers finely fringed, of elegant form with high center. Color, rich ruby-carmine shaded to velvety scarlet.

**Matchless.**—A wonderful new white. Large massive flowers on strong upright stems. Sweetly perfumed.

**Pink Sensation.**—Very free flowering. Flowers very large. Color, soft medium rose-pink, of a delicate and pretty shade.

**Alice.**—Flowers large, round and full; color a delicate flesh pink, with a very strong clove fragrance; has excellent keeping qualities.

**Princess Dagmar.**—The largest and best of its color, a bright dazzling crimson. Always in bloom.

**Yellowstone.**—Vigorous growing, free flowering. Color canary yellow, lightly splashed with pink. A gem among fancy carnations.

### Bountiful Collection Everblooming Carnations

Price, 15c each; 12 for \$1.25 postpaid.

**Bonora.**—White flaked with scarlet.

**Beacon.**—A brilliant, deep scarlet.

**Enchantress.**—A superb flesh pink.

**Eldorado.**—Yellow, nicely streaked crimson.

**Herald.**—Large, bright scarlet, fringed.

**Lady Bountiful.**—Pearly white; fringed.

**May Day.**—Soft pink with silvery sheen.

**Mrs. C. W. Ward.**—Bright, glistening pink.

**Pocahontas.**—Bright, rich crimson.

**Philadelphia.**—Rose-pink; fragrant.

**Victory.**—Best intense scarlet.

**White Enchantress.**—A beautiful white.

Ashland, Ore., April 26, 1916.

Gentlemen: My Roses, Ivy, Carnations and everything that I have sent to you for are doing fine. Thanking you kindly.

Yours truly,

MRS. C. E. ABBOTT.

Centerville, Wash., May 8, 1916.

Gentlemen: Enclosed find 20c, for which kindly send me a Madame Vibert Pelargonium. The other plants I ordered from you are doing just fine and I am more than pleased with them.

Yours truly,

Mrs. ZASH NIEMELA.

## Beautiful Flowering Begonias

10c each, full collection of 6 for 50c postpaid.

Probably the most satisfactory class of plants for house culture obtainable. Of easiest possible culture, their waxy flowers produced in much profusion together with their handsome foliage make them most desirable subjects for the window garden.

**Argentea Guttata.**—Handsome erect growing sort, with pointed wine-colored leaves with silvery white spots. Pure white flowers.

**Bertha Chaterscher.**—The freest-flowering Begonia we have; glossy green leaves and bright scarlet flowers.

**Gloire de Chatelaine.**—Glossy ovate green leave, covered the year around with beautiful pink flowers, a fine window plant.

**Marguerite.**—Bronzy green, with purple cast; large trusses of cream and rose-colored flowers.

**Marjorie Daw.**—A strong growing variety of slender habit with glossy green foliage and producing large racemes of salmon pink flowers, drooping gracefully about the plant.

**President Carnot.**—Strong growing, large leaved sort, with pendulous clusters of deep pink flowers during a large part of the year.



Begonia—Gloire de Chatelaine.

NEW—Chinese Wool Flower, page 52, and Nemesis, page 60. Plants in season, 10c each, 75c Doz., postpaid. THESE ARE NEW AND VERY SHOWY.



## Queen Collection Japanese Chrysanthemums

Price, 15c each; sets of 10 sorts, \$1.00 postpaid.

**Artistic Queen**—Fine exhibition variety. Extra large blooms, loosely incurved, very strong stem. Color, rose-pink, very fresh and beautiful.

**George Bruzzard**—A beautifully shaped bloom; bronzy red in color with reverse side of petals old gold.

**Golden Eagle**—Large in size, perfect in form and a superb golden yellow in color.

**Harvard**—Produces a good medium sized bloom of the darkest shade of crimson.

**Kitty Lawrence**—Lovely shades of cream and fawn. Large, very gracefully formed flowers, with irregular tubular petals of fine substance.

**Naomah**—Incurved white. Petals broad and incurving. Flowers of excellent substance.

**Chieftain**—A beautiful broad-petaled, incurving variety, round and ruffled; one of the prettiest forms.

**Ramapo**—An excellent variety. The heavy golden yellow, richly colored.

**Mancato**—An enormous exhibition variety with perfectly double flowers. Color, rosy purple.

**William Turner**—Pure white in color. It is enormous in diameter, deep in build and very perfect in form.



"Incurved" Chrysanthemum

## Countess Collection New English Garden Chrysanthemums

To those persons who have planted the late flowering sorts and failed to get them into bloom before frost, these new imported sorts will appeal. All will flower readily in the garden during September and October, and while the flowers will not be as large as the late sorts their freedom of bloom will make up for anything that may be lacking in that respect.

Price, 15c each; full collection of 10 sorts, \$1.25.

**Carrie**—Bright golden yellow flowers in great profusion during September. Dwarf habit.

**Cranford Pink**—Lovely silvery pink flowers of fine size, nicely incurved and very lasting. Fine for cut flowers.

**Countess of Cariel**—A very free flowering sort or dwarf habit. Color, terra cotta and bronze. Rich and handsome.

**Glory of Seven Oaks**—Deep golden yellow, very free flowering. Excellent dwarf habit.

**Groachers Crimson**—Large handsome flowers of a rich shade of crimson. Blooms very early.

**Leslie**—Light canary yellow. Covered with its pretty flowers early in the fall.

**Mignon**—Rosy pink, shaded silvery. Strong vigorous grower and very free.

**Nina Blick**—Rich golden bronze shaded to yellow. Dwarf spreading habit and free flowering.

**Normandie**—Delicate shell pink flowers of wax-like texture. Fine for cut flowers. One of the best of this type.

**Queen of Whites**—Snowy white flowers cover the plant early in the fall. A gem in the garden.

## Beauty Collection Choice Fuchsias

Beautiful, graceful, free flowering, easily grown, plants for window, porch or yard decoration.

Price, 10c each; set of six sorts, 50c.

**Annie Earle**—Tube and sepals waxy white, corolla single, clear carmine; plant splendid and free blooming.

**Dr. Brooks**—Rich, dark blue corolla, with crimson sepals. A beautiful single variety, never out of bloom.

**General Roberts**—Flowers very large, corolla plum color, tube and sepals crimson; one of the finest double varieties.

**Little Beauty**—A dwarf growing double variety, producing with great freedom small flowers of great beauty. Purple corolla with scarlet sepals. A little gem.

**Molesworth**—Superb double white variety; tube and sepals bright scarlet; corolla large, double and waxy white.

**Sylvia**—Calyx scarlet. Corolla giant in size and pure white in color. Beautifully formed single flowers.

## Rex Begonias

Grown for the beauty of the foliage. The leaves are large, variegated and margined with a peculiar silver-metallic gloss. The most ornamental of window plants; also useful in vases and baskets.

20c each; 3 sorts for 50c



Fuchsia Plant

**NEW CANNAS**—You ought to try our new Cannas **FIREFLY** and **CITY OF PORTLAND**. See descriptions, page 89.



## General Price List of Bedding Plants

Note.—"P" stands for plants from pots; "T" transplanted plants from boxes.



During April, May and June we have thousands of flowering and ornamental annual plants. No order too large or too small. Write for 100 prices if interested.

**REMEMBER**, we are not offering you little seedling plants, pulled from the seed beds. Our plants are strong, healthy, transplanted plants from flats or pots, raised from our **HIGHEST QUALITY SEED** or propagating plants of **SUPERIOR MERIT**. **FOR DESCRIPTIONS SEE FLOWER SEED DEPARTMENT OF THIS CATALOG.**

|  | Each.  | Doz. |   | Each.       | Doz. |
|--|--------|------|---|-------------|------|
| <b>Agerantum—</b>                      |        |      | <b>Lobelia—</b>                                   |             |      |
| Blue, white or mixed, T.....           | .05    | .50  | Compacta or Trailing, T (\$3.00                   |             |      |
| <b>Alyssum—</b>                        |        |      | 100) .....  | .05         | .40  |
| Sweet, T .....                         | .05    | .50  | 2-inch pots, blooming .....                       | .08         | .75  |
| <b>Aster—</b>                          |        |      | 3-inch pots, full bloom.....                      | .15         | 1.50 |
| Giant Crego, white, pink, pur-         |        |      | <b>Mignonette—</b>                                |             |      |
| ple or mixed, T .....                  | .35    |      | Sweet, T .....                                    | .05         | .60  |
| Other varieties, T .....               | .25    |      | Sweet, 2-inch pots .....                          | .10         | 1.00 |
| <b>Candytuft—</b>                      |        |      | <b>Myosotis—</b>                                  |             |      |
| Mixed or white, T .....                | .05    | .50  | Forget-me-not (clumps) .....                      | .10         | 1.50 |
| <b>Carnation—</b>                      |        |      | <b>Pansy—</b>                                     |             |      |
| White, pink, red, F or P.....          | .10    | .75  | Choice plants not in bloom,                       |             |      |
| Named varieties (see next page)        |        |      | postpaid .....                                    |             | .60  |
| <b>Chrysanthemum—</b>                  |        |      | 12 in a basket, Steel's Masto-                    |             |      |
| White, yellow, pink, F.....            | .06    | .60  | dons in full bloom, by express                    |             |      |
| Named varieties (see our catalog)      |        |      | only, charges collect .....                       | .75 to 1.00 |      |
| <b>Cosmos—</b>                         |        |      | <b>Petunias—</b>                                  |             |      |
| Red, pink, white or mixed, T... .      | .05    | .50  | Irvington Beauty, new pink.                       |             |      |
| <b>Cobea Scandens—</b>                 |        |      | Single Ruffled Giants, all colors.                |             |      |
| From 2-inch pots .....                 | .15    | 1.50 | Choice Double Kinds, all colors.                  |             |      |
| From 3-inch pots .....                 | .20    | 2.00 | From 2-inch pots .....                            | .10         | 1.00 |
| <b>Coleus—</b>                         |        |      | From 3-inch pots .....                            | .20         | 2.00 |
| Choice colors, 2-inch pots....         | .10    | .75  | From 4-inch pots .....                            | .25         | 2.50 |
| Choice colors, 3-inch pots....         | .15    | 1.50 | Ordinary Single Mixed, T.....                     | .05         | .50  |
| <b>Daisy—</b>                          |        |      | Double Mixed, T .....                             | .05         | .60  |
| Mrs. Saunders, new, 2-inch pots        | .15    | 1.50 | <b>Phlox—</b>                                     |             |      |
| Mrs. Saunders, new, 3-inch pots        | .25    | 2.50 | Drummond, T .....                                 | .05         | .60  |
| <b>Dracenia Palm (Fountain Plant),</b> |        |      | <b>Salvia (Scarlet Sage)—</b>                     |             |      |
| (see catalog sizes, 35c to 50c         |        |      | Splendens, T .....                                | .06         | .60  |
| up to \$1.50.)                         |        |      | Zurich, a Fireball, new dwarf, T                  | .07         | .75  |
| <b>Geraniums—</b>                      |        |      | 2-inch pots .....                                 | .10         | 1.00 |
| Single, choice named varieties in      |        |      | 3-inch pots .....                                 | .15         | 1.50 |
| red, salmon pink, deep pink,           |        |      | 4-inch pots .....                                 | .25         | 2.50 |
| light pink or white.                   |        |      | <b>Stocks—</b>                                    |             |      |
| Double, choice named varieties,        |        |      | Fine Mixed Colors, T.....                         | .05         | .60  |
| dark red, bright red, salmon           |        |      | <b>Verbena—</b>                                   |             |      |
| pink, double white or ivy              |        |      | Fine Mixed, T .....                               | .06         | .50  |
| leaved trailing, pink or red.          |        |      | From 2-inch pots .....                            | .10         | 1.00 |
| From 2-inch pots .....                 | .10    | 1.00 | <b>Vinca—</b>                                     |             |      |
| From 3-inch pots .....                 | .15    | 1.50 | Variegated, from small pots...                    | .10         | 1.00 |
| From 4-inch pots .....                 | .25    | 2.50 | Variegated, from large pots...                    | .20         | 2.00 |
| From 5-inch pots .....                 | .35    | 3.75 | <b>Plant Boxes.</b>                               |             |      |
| <b>Pelegonium (Lady Washington)</b>    |        |      | If you have boxes that are filled with dirt       |             |      |
| From 2-inch pots .....                 | .10    | 1.00 | we can furnish Fertilizer and Plants, and         |             |      |
| From 3-inch pots .....                 | .25    | 2.50 | plant at 60c to \$1.00 per foot, according to     |             |      |
| From 4 and 5-inch pots, spec-          |        |      | kind and size of plants.                          |             |      |
| imens in bloom .....                   | .50 to | .75  | <b>Japanese Kegs.</b>                             |             |      |
| <b>German Ivy—</b>                     |        |      | Filled with large flowering plants and            |             |      |
| Trailing, 2-inch pots .....            | .10    | 1.00 | vines.  |             |      |
| Trailing, 3-inch pots .....            | .15    | 1.50 | Size 13-in. \$3.00 to \$5.00 with Dracaena center |             |      |
| <b>Heliotrope—</b>                     |        |      | Size 13-in. 2.50 to 3.50 with Daisy center        |             |      |
| Blue, T .....                          | .07    | .60  | <b>Hanging Baskets.</b>                           |             |      |
| Blue, 2-inch pots .....                | .10    | 1.00 | Filled with large flowering plants and            |             |      |
| Blue, 3-inch pots .....                | .15    | 1.50 | vines.  |             |      |
| Blue, 4-inch pots .....                | .20    | 2.25 | Size 10-in. \$2.00 to \$2.25 (Cannot be           |             |      |
|  |        |      | Size 12-in. 2.50 to 3.00 shipped safely)          |             |      |

**NOTE.**—If you add 10c per dozen we will prepay charges on above except on plants from pots (3 inches or over), which cannot be mailed safely and must go by express. No plants sent C. O. D. Write for prices on other varieties wanted.



## BEAUTIFUL FERNS

A home, no matter how lavishly furnished, is not complete without decorative plants and palms.

The bold, majestic palms and delicate, feathery foliage of the ferns lend a grandeur and magnificence that cannot be obtained in any other way.

**OSTRICH PLUME** (See cut)—The fronds of this popular variety are the most delicate and plume-like. They are beautiful, full and fluffy, well-grown plants; are truly magnificent and last well in the house. Choice plants, 20c to 35c, post paid; specimen plants in pots, \$1.00 to \$2.00; extra large, \$2.50 to \$3.50.

**BOSTON FERN**—One of the most beautiful and useful of house plants. It is of easy culture, and its sword-like fronds, in large specimens, attain a length of 3 to 4 feet, produced in a bewildering mass, arching, curving and interlacing in every conceivable direction.

Choice plants, 20c to 35c, post paid; specimen plants in pots, 75c to \$1.00; \$1.50 and up to \$2.50.

**ASPARAGUS SPRENGERI** (Emerald Feather) (See cut No. 1)—This is undoubtedly one of the handsomest and most valuable evergreen trailing plants for the house and conservatory ever introduced. It is especially valuable for pots, vases, baskets, etc., covering all with its beautiful sprays of lovely green, feathery foliage; quite hardy and valuable for hanging baskets or porch boxes in summer if given partial shade and plenty of water.

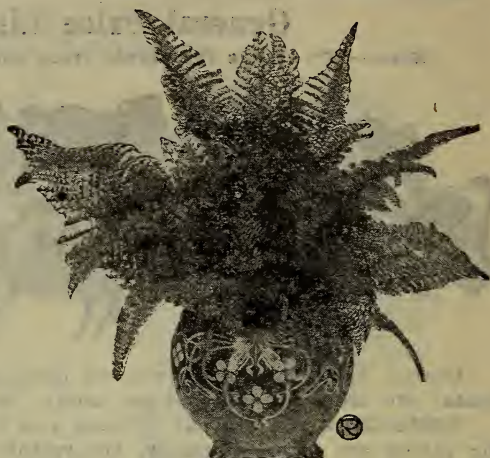
Choice plants, 20c to 30c, post paid; specimen plants in pots, 35c to 75c; extra large pots or baskets, \$1.50 to \$2.50.

**ASPARAGUS PLUMOSUS** (Climbing Lace Fern) (See cut No. 3)—A finer and more delicate plant than the Sprengeri, but hardy and easily grown. Very satisfactory for window and house culture. An extremely graceful window climber, bright green, feathery foliage, as fine as the finest silk or lace.

Choice plants, 20c to 30c, post paid; specimen plants in pots, 25c to 75c.

**MAIDEN HAIR FERN** (*Adiantum Cuneatum*)—A very beautiful and graceful fern.

Small plants, 20c, post paid; choice plants in pots, 35c and \$1.00 each.



Ostrich Plume Fern

### Filled Fern Dishes

These are pretty, popular, fashionable and very desirable for center pieces for the tea or dinner table or as ornamental plants on the sideboard or center tables.

A choice collection of plants in pretty matt green dishes, \$1.50 to \$2.00. In fancy dishes, \$2.00 to \$3.50. (See cut No. 2.)

**NOTE**—Must go by express; cannot be mailed.

### Beautiful Small Ferns

These handsome little ferns are used mostly in filling fern dishes, your choice of the following 20c each; 3 for 50c, post paid.

**Aspidium Tsussimense** — Without question the most valuable of all ferns yet introduced for fern dishes; of strong but dwarf and graceful habit.

**Cryptomium Falcatum** (The Holly-Leaved Fern.)—One of the most desirable, very hardy and pretty.

**Pteris Argyrea** (Silver Fern)—A very showy fern, with variegated foliage.

**Pteris Wilsoni**—A very pretty and useful fern; green leaves with the ends very peculiarly crested; beautiful sort for fern dishes.



No. 1, *Asparagus Sprengeri*. No. 2, Filled Fern Dish. No. 3, *Asparagus Plumosus*.

**Specimen Plants**—These are large, choice, well-shaped plants, growing in pots, and are very beautiful. They cannot be mailed. We wrap and pack carefully and ship by express. Read what we do about prepaying charges—page 2.



## PALMS AND DECORATIVE POT PLANTS

Every one knows how beautiful palms and decorative plants are, and how much they improve the parlor, hall or dining room. We offer here only the best and most desirable kinds of the easiest culture, but we can supply rare tender specimens if wanted.

**Note.**—Plants in pots cannot be mailed. Read about prepaying, page 2.

### **ARAUCARIA EXCELSIA** (Norfolk Island Pine)—

This beautiful plant resembles the pine somewhat in appearance, though much finer in texture; it is particularly adapted to parlor table decoration. It is most unique in appearance, the branches being arranged in neat, symmetrical whorls. They do not require much sun, and are hardy and easily cared for. (See cut No. 5.) Choice plants in pots, 10 to 12 in., \$1.00 to \$1.50; 15 to 18 in., \$2.00; 18 to 24 in., and up, \$2.50 to \$4.00.



No. 4, Aspidistra. 5, Araucaria Excelsior. 6, Kentia Palm.

**KENTIA** (See cut No. 6) — A beautiful, graceful, handsome-looking, strong-growing palm, with deep green, crisp foliage; inclined to dwarf and spreading habit. One of the most popular for house culture, as they are very hardy, and stand the dry atmosphere. If we could have but one palm, it would be a Kentia. (See cut.) Small plants, 12 to 15 in., 75c to \$1.00, postpaid. Choice plants in pots, 18 to 24 in., \$1.50 to \$2.00; specimen plants, \$5.00 to \$25.00.

**ASPIDISTRA** (See cut No. 4)—Stately decorative house plant of rapid and hardy growth. The leaves grow quickly from the ground to a height of 18 inches or more. Will stand more gas, dust, cold and heat than any other palm we know of. We have both green and variegated green and white.

**Green or Variegated Leaves, fine specimens, in pots, \$1.50 to \$3.00 and up.**

**PHOENIX ROEBELENI** (See cut No. 7)—A new palm. One of the most graceful and the hardiest. The horticultural world has enthused over this beautiful palm. It has

the grace and lightness of *Cocos Weddelliana*, but is more robust in growth and has ten-fold the foliage of that fine variety. Foliage from the ground up, gracefully recurved and spreading in habit. It will be most popular for house decoration. Choice plants in pots, \$1.00 to \$2.00; specimens, \$2.50 to \$4.00.

**RUBBER PLANT** (*Picus Elastica*) (See cut No. 8)—This is certainly one of the best plants grown for decorative purposes. It succeeds well with ordinary treatment. Its glossy, thick, dark-green leaves are not affected by dust or gas.

**Choice plants in pots, 12 to 18 in., 75c to \$1.00; 18 to 24 in., \$2.00 to \$2.50.**

**DRACAENA INDIVISA** (Fountain Plant)—This plant is unsurpassed for hardiness. Leaves graceful, long, narrow and pointed, used extensively for centers in pots, boxes or urns with other plants. Perfectly hardy outside in summer.

**Nice plants, 12 to 15 in., 35c to 50c, postpaid; 18 to 24 in., in pots, \$1.00 to \$1.50.**



No. 7, Phoenix. 8, Rubber Plant. 9, Cocos Palm.

We carry a full line of standard and new styles. Jardinieres, Pots, Japan Tubs, Etc.

### **COCOS WEDDELLIANA**

(See cut No. 9) — The most elegant and graceful of all the smaller palms. Its slender, erect stem is freely furnished with its graceful arching leaves of rich green color. Small plants are very desirable for centers in fern dishes.

**Choice plants, 12 in., 50c to 75c, postpaid; 15 to 18 in., in pots, \$1.50 to \$2.00. Specimens, \$3.50 to \$5.00.**

## CANARY BIRDS

Did you ever hear an imported Hartz Mountain Canary Sing? They are the sweetest singers on earth. See pages 139-140.



## HARDY PERENNIAL FLOWERING PLANTS

### You Should Plant More Perennials

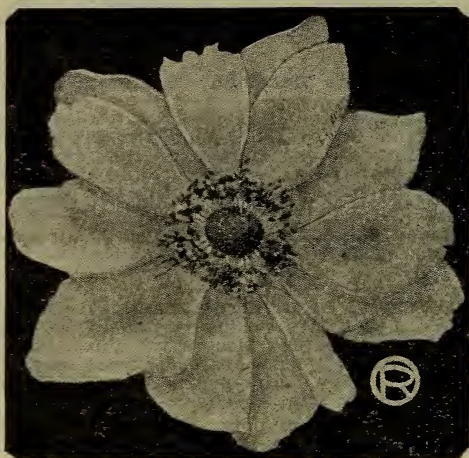
No class of plants enjoy greater popularity at the present time than the Hardy Perennials. They have made rapid strides into public favor the past few years, until now they may be considered to have a prominent and a permanent place in our American gardens. Beginning almost before the snow is off the ground, early-flowering varieties open their blossoms, as welcome harbingers of spring. Almost every week until late in the fall some new variety bursts forth into entrancing loveliness, blooming so persistently as to almost defy Jack Frost in his efforts to subdue the floral kingdom. A start may be obtained at so small an expenditure as not to be counted when measured with the satisfaction and pleasure derived from them. Once planted they are there to stay, requiring very little care, increasing in size and bloom and growing better from year to year.

#### VERY LARGE CHOICE PLANTS—LOW PRICES.

This year we are in a position to supply you with the most desirable, new and popular varieties at lower prices than ever. We have 25,000 extra large field-grown plants in the following varieties, also many other kinds which limited catalog space will not permit us to describe.

**PRICES THIS YEAR:** All perennials unless otherwise priced are 15c each, \$1.50 per dozen, postpaid.

**NOTE.**—If you wish to pay express or freight charges we will send very large plants and leave more dirt on the roots.



Anemone.

**ANEMONE—Japonica.** These beautiful Wind-flowers are one of the most important hardy plants. They begin blooming early in August and continue in full beauty until cut down by hard frost. Excellent for bouquets, lasting for days when cut. 2½ to 3 feet.

**PRICES, YOUR CHOICE, FOLLOWING 4 KINDS, EACH 15c, 4 FOR 50c.**

**Prince Henry.** Rich pink, semi-double.

**Whirlwind.** Pure white, semi-double.

**Queen Charlotte.** Silvery pink, very large, semi-double.

**Eubra Superba.** Rosy red.

**NEW GIANT FLOWERED VARIETIES.**  
20c EACH, 4 FOR 70c.

**Géante Blanche.** Mammoth pure white.

**Loreley.** Cup shaped, bright silvery mauve pink, rich and rare.

**Kriemhilde.** Semi-double, 4 inch flowers, petals long, narrow and closely set. Beautiful rose pink.

**Alice.** Silvery rose, shaded carmine. Quite full, very beautiful.

**ARABIS—Rock Cress.** One of the most desirable of the very early spring flowering plants for edging and the rock garden. Forms a dense carpet, completely covered with pure white flowers. 6 inches.

**ALYSSUM—Gold Dust.** (Sexatile Compactum.)—Large heads of golden yellow flowers in May and June; silvery foliage; fine for rockeries; 6 inches.

**AQUILEGIAS or Columbines.**—The Columbines are one of the most elegant and beautiful of hardy plants, producing their graceful spurred flowers on stems rising two feet or more above the beautifully divided foliage, and are highly prized for cutting; June to September. Mixed, 15c

Separate Colors (about 90 per cent true). Violet blue, golden yellow, white or rose pink.

Each, 20c; doz., \$2.00

**BELLIS PERENNIS—English Daisy.**

**Giganteum.**—Improved, double, large flowering; fine for edging or borders. Flowers extra fine. 2 inches across. Double white or pink.

Each 20c; doz. \$2.00

Double—Red or white. Each 10c; doz., \$1.00

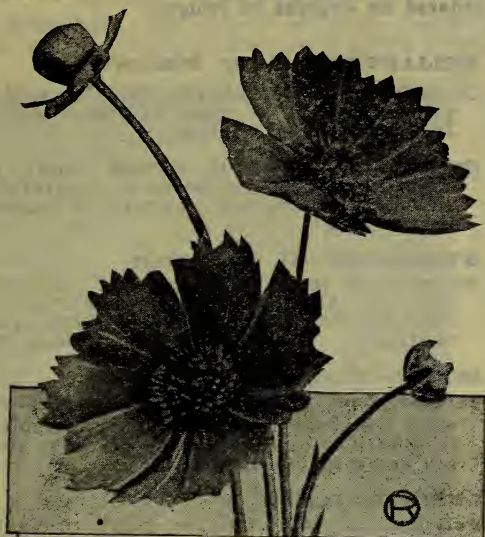


Canterbury Bells—Calycanthema

**NOTE.**—New parcel post rates now enable us to send this class of plants by mail at prices quoted. These plants are perfectly hardy and will bloom nicely the first season.



**PRICES**—All varieties, strong field-grown clump, 15c each, \$1.50 dozen, unless otherwise priced. Largest plants always sent by Express or Freight.



Coreopsis.

## Canterbury Bells

**CAMPANULAS**—or Bellflowers. Indispensable hardy garden flowers, of much variety of form, some being of tall and imposing habit, while others are dwarf, compact little plants suitable for edging, rock work, etc.

**Persicifolia** (Peach Bells).—Large bell shaped flowers during June and July. 3 feet. Blue or white.

**Medium Calycanthema** (Cup and Saucer Canterbury Bells).—A beautiful form of this favorite flower. (See cut page 78.) Blue, Rose, White or Mixed.

**Gigantea Moerheimi**.—A grand sort with long stems of pure white double camellia-like flowers, 2 to 2½ inches in diameter; in bloom from the middle of May until late in July. 2 to 3 feet.

## Coreopsis

**Lanceolata Grandiflora**. Popular hardy plants. The flowers are a rich golden-yellow, of graceful form and invaluable for cutting; the main crop comes during the latter part of June, but it continues in bloom the entire summer and autumn; it succeeds everywhere; 1½ feet. (See cut.)

**DAISY**—See "Bellis", page 78, for English, also "S" for Shasta Daisy, page 82.

**DICENTRA**—Bleeding Heart.

**Spectabilis**. An old-fashioned favorite; its long racemes of graceful heart-shaped pink flowers are always attractive. Perfectly at home in any part of the hardy border, and especially valuable for planting in the shade. (See cut page 80.)

Each, 25c

Don't overlook our grand collection of Paeony Roots, page 89.

## Delphinium

**Hardy Larkspur**. These are deservedly one of the most popular subjects in the hardy border, bold, attractive and highly prepossessing plants of easiest culture; perfectly hardy; 3 feet.

Hybrids.

Each, 15c; doz., \$1.50

### CHOICE NAMED VARIETIES.

Full Collection.

6 kinds \$1.50

**Belladonna**. A free and continuous bloomer; flowers clear turquoise blue; very beautiful. Each, 20c; doz., \$2.00

**Carmen**. Flowers very large and semi-double; of a deep blue; center rosy plum. Each, 25c

**Duke of Connaught**. Very attractive, rich ox-ford-blue, with a bold white eye.

Each, 25c

**Formosum**. Dark blue; white center; an old favorite; 3 to 4 ft. high. Each, 20c

**King of Delphiniums**. New and distinct; giant, semi-double flowers on strong stems; deep blue, white center. Each, 40c

**Moerheimi**. A new and continuous bloomer; pure white. Each, 35c

3 feet. June. Each, 25c; doz., \$2.50

ing. June to October. Mixed.



Delphinium (Plant and Flower Spike.)

**DIGITALIS**—Foxglove. Old-fashioned, hardy, desirable plants with broad foliage and showy flowers borne on spikes. June and July. 3 to 4 feet. Mixed colors.

**Monrosa** (Giant Foxglove). Handsome, variously colored flowers in spikes surmounted with one large, saucer-shaped terminal flower. Each, 25c

## CANARY BIRDS, PARROTS, RABBITS, PETS, CAGES, ETC.

This department of our business is rapidly increasing and we now publish a large illustrated and descriptive catalog that we will gladly mail to anyone interested. Send postal request today.



## Hardy Perennial Flowering Plants—Continued

**PRICES**—All varieties, strong, field-grown plants, 15c each, \$1.50 dozen, unless otherwise priced. Largest plants always sent when ordered by express or freight.



*Dicentra*—Bleeding Heart. (See Pg. 80)

**DORONICUM**—Leopards Bane. One of the most effective early flowering perennials. Very large, rich yellow single flowers with long stems during May, June and July; 2 feet. Often called Yellow Marguerite.

### **EULALIA**

*Japonica Variegata*. A very ornamental variety; long, narrow leaves, striped green, white and often pink or yellow. Small plants 15c to 25c; clumps 50c to 75c each.

### **FORGOT-ME-NOT**—*Myosotis*

*Palustris*. A variety that is hardly ever out of flower; useful in a shady spot in the border.

### **Gaillardia**—Blanket Flower

*Grandiflora*. One of the showiest of perennials. Rich and pleasing flowers ranging from red to yellow around a dark maroon center; excellent for cutting; 3 feet; June to frost.

### **Gypsophila**—Baby's Breath

*Paniculata*. Minute white flowers borne in enormous quantity in open panicles during summer months. Be sure and have a few plants of this for cutting, as it works up beautifully in bouquets of other flowers; 3 feet.

*Paniculata Fl. Pl.* New. Delicate double white flowers. Very pretty. Each, 25c

**HOLLYHOCKS**.—Few hardy plants combine as many good qualities as the Hollyhock. For planting in rows or groups on the lawn, or for interspersing among shrubbery they are invaluable. The flowers form perfect rosettes of the most lovely shades of color. We offer strong plants, which will flower this season. **Separate or mixed colors.**

### **HELIANTHUS**—Hardy Sunflowers.

*Multiflorus Fl. Pl.* Large, double, golden-yellow flowers in great profusion during July and August; 4 feet.

*Sparsifolius*. Gracefully formed single variety, large, deep yellow color, long stems; splendid for cutting; August to September; 6 feet.

### **HYPERICUM**—St. John's-wort.

*Moserianum* (Gold Flower.) Of drooping, trailing nature. Fine for rockeries, etc. Free flowering. Rich golden-yellow. June to frost. Each, 15c; large plants, 25c

### **IBERIS**—Hardy Candytuft.

*Sempervirens*. Most desirable dwarf plants with evergreen foliage, which is completely hidden with dense heads of white flowers early in the spring.

### **LUPINUS**—Lupine.

*Polyphyllus*. An effective plant, producing large, long spikes of blue flowers. June. Each, 20c; doz., \$2.00

*Moerheimi Roseum*. A very pretty variety with rosy-pink flowers. Very effective; 3 feet. June. Each, 25c; doz., \$2.50

## Poppy

*Nudicaule* (Iceland Poppy.) A beautiful race and among the most desirable of our herbaceous plants. The plant forms tufts of fern-like foliage, from among which the slender flowers-stalks rise to about a foot in height and bear fragrant, cup-shaped flowers of white, yellow and orange-scarlet. The profusion of bloom is astonishing. June to October. **Mixed.**

*Orientalis*. Bright red with a black blotch at the base of each petal. June to July. **Oriental, Salmon Queen.** Beautiful salmon pink. Each, 20c; doz., \$2.00



Iceland Poppy.

Sherwood, Ore.

Routledge Seed & Floral Co.

Gentlemen: I am more than pleased over the Roses I received of you last year, and they are blossoming fine, and I am sending in another order for roses, the rose trees and bushes. Thanking you for attending my order so perfect.

Yours truly,

MRS. ABBE PETERS.



## Hardy Perennial Flowering Plants—Continued

**REMEMBER:** All prices of above stock is 15c each, \$1.50 dozen (unless otherwise priced) and is for large 2-year, field-grown clumps, that will bloom profusely the first season.



**Phlox Decussata.**

### Pampas Grass

**Gynerium Argenteum.** A noble ornamental grass, easily grown, producing long, narrow pointed leaves and majestic, silvery white plumes, which are very valuable for winter decoration. Grows 6 to 8 feet high. Young plants 25c; strong roots, 35c to \$1.00; large specimen plants, \$1.50 to \$2.50 up.

### PINKS—Dianthus.

**Flumaris.** Bearing sweet clove-scented flowers in the greatest profusion during May and June. Indispensable for the hardy border and for cutting. 1 foot. Finest. Mixed or Double White.

### Primulus—Primrose

The hardy primroses are among the most beautiful and interesting of our early spring flowers. (See cut.)

**Veris (English Cowslip).** The richest shades, from pure yellow to the deepest crimson maroon.

**Vulgaris.** Canary yellow, very early and fragrant.

### PHLOX HARDY—

**Subulata (Moss, or Mountain Pink).** An early spring-flowering type, with pretty moss-like evergreen foliage, which, during the flowering season, is hidden under the masses of bloom. An excellent plant for the rockery, the border, and invaluable for carpeting the ground or covering graves. White, Pink or Lavender.

Each, 15c

**Amoena.**—Best for carpeting the ground, the rockery or the border; it grows but 4 inches high, and in spring is a sheet of rich, bright pink flowers.

Each, 15c; doz., \$1.50

### PHLOX—Continued

#### Phlox

**Decussata.** Among the hardy perennial plants no class is of more importance than the Phloxes, succeeding in almost any soil and position, and flowering through a long season. Excellent for cutting and decorating or for mass effects. Keep well in water.

#### NEW AND EXTRA SELECTED VARIETIES

—Rare and rich shades and flowers of largest and best types, very choice. **Prices:**

Each, 20c; doz., \$2.00; one plant each variety (8), for only \$1.25 postpaid.

**Antonin Mercie.** Large panicals bluish lilac, white halo.

**Bridesmaid.** Pure white, with large pink eye.

**Von Lassburg.** Splendid pure white, very large.

**Vesuvius.** Pure red, with bright purple eye, a dazzling color.

**Goliath.** Bright crimson, handsome, large flowers.

**Mrs. Jenkins.** Immense panicals of large, white flowers. Fine for massing.

**Gruppenkoenigin.** Beautiful salmon.

**Gen. Von Hentsz.** Brilliant salmon red, white eye, large.

#### CHOICE NAMED VARIETIES OF REAL

**MERIT.** Each, 15c; doz., \$1.50. **Special—** One each in this collection of 6 for 70c postpaid.

**Mrs. Lingard.** Pure white, early and continuous bloomer.

**Coquelicot.** A fine pure scarlet, crimson eye.

**Champs Elysee.** Bright rose, majestic, very effective.

**Eugene Danzanvillier.** Lilac shading to white. Free bloomer.

**Obergartner Wittig.** Bright magenta, crimson eye, large, fine flower.

**Geo. Strohlein.** Bright scarlet, extra.



**Primulus.**



**REMEMBER**—We prepay charges at 15c each, \$1.50 dozen (unless otherwise priced). Plants are large, 2-year, field-grown clumps, that will bloom profusely the first season.

Roseburg, Ore., March 28, 1916.

Routledge Seed & Floral Co.

Dear Sirs: Plants received yesterday and am very much pleased. They are very nice. Some day I expect to see your place of business.

Respectfully,

MRS. E. C. HERRICK.

#### **RUDBECKIA—Cone-flower.**

Indispensable plants for the hardy border; grow and thrive anywhere, giving a wealth of bloom, which are well suited for cutting.

**Lanceolatus (Golden Glow).** Flowers beautiful golden-yellow; very double. Marvelous continuity of bloom from June till late fall; 6 to 8 feet.

#### **SAXIFRAGAS—**

**Umbrosa (London Pride).** A low-growing, spreading sort, throwing up stems a foot high of pretty pink flowers in dainty clusters. Small, dark evergreen leaves, a fine border plant or for rockeries.

#### **Shasta Daisy—Burbank**

**Chrysanthemum Leucanthemum Daisy.** Very large daisy-like flowers, often measuring 4 to 5 inches across, having three or more rows of petals of the purest white. Flowers produced in great profusion on long strong stems. Very popular; 2 to 3 feet.  
Each, 10c, 15c and 30c

#### **Tritoma—Red-Hot Poker**

The early, free and continuous blooming qualities of the newer varieties have made Tritomas one of the great bedding plants; 3 to 4 feet flower spike.



Shasta Daisy.



Tritoma.

#### **VIOLETS**

**California.** Single. Very showy and beautiful.  
Each, 15c; doz. \$1.50

**Double Russian.** Flowers double of gigantic size; color, a very rich shade of blue, and extremely fragrant.  
Each, 15c; doz. \$1.50

**Small Plants,** single or double and blue or white.  
10c each; \$1.00 per dozen

#### **WALLFLOWERS**

The old favorite fragrant Wallflower. Yellow, Red, or Mixed Colors.  
Each, 15c; doz. \$1.50

#### **YUCCA (E).—Adam's Needle.**

A stately foliage and flowering plant. See illustration and description, page 104.

#### **Dads is THE Light**

When we find something of special merit we always want our friends and customers to know about it, **ESPECIALLY** when it is something that will give **PLEASURE**, or **COMFORT** and **SERVICE**. Read about Dad's Electric Lantern, page

### **OUR DESCRIPTIVE CATALOG OF TREES, SHRUBS AND ORNAMENTALS**

Limited space in this catalog will not permit us to give full descriptions of all our Fruit, Shade and Ornamental Trees and Shrubs and Vines, Roses, etc., but we will gladly mail you a copy of our **DESCRIPTIVE FALL CATALOG OF NURSERY STOCK**. Remember we employ no agents and prepay charges on certain sized orders.



## German Iris—Iris Germanica

The German Iris are among the most desirable and easiest grown of our spring-flowering hardy plants, producing in May their showy flowers of exquisite coloring, combining the richest and most delicate tints.

Mixed, good variety. Each, 7c; Doz., 75c

Choice named varieties as follows, each 10c; dozen \$1.00.

**Florentina Alba.** An excellent variety for cutting, and an early bloomer. Flowers ivory white, tinged with lilac.

**Honorable.** Intense yellow, falls a beautiful bronze.

**Mad. Chereau.** Pure white, edged with azure blue; falls deep white with blue pencilling.

**Parisensis.** Uprights fine blue, falls deep blue, large and very early, fine companion to Florentina Alba.

### NEW GERMAN IRIS.

PRICE, Each, 35c; 6 for \$1.75.

A splendid collection of the latest introductions, embracing not only new color; but improved forms.

**King of Iris.** A striking novelty, with flowers of perfect form, the standards clear lemon-color, falls deep satiny-brown, with a broad border of golden yellow.

**Lohengrin.** Foliage and flowers of gigantic size, the flowers nearly 5 inches deep, with petals 2 inches wide, are of a deep violet-mauve.

**Nibelungen.** Standards fawn-yellow, falls violet-blue with fawn margin; distinct and pretty.

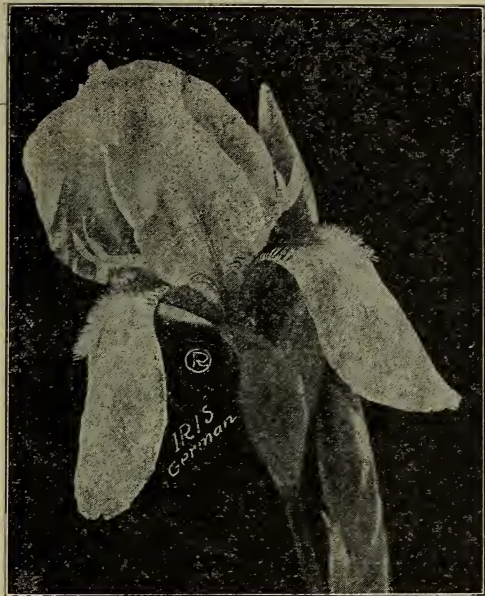
**Pallida Dalmatica.** A queen among flowers, grand and stately. Standards lavender; falls clear, deep lavender. Flowers large and extra fine.



Japan Iris.

### SPANISH IRIS

Separate Colors. Doz., 25c; 100, \$1.25  
Superfine Mixed. Doz., 20c; 100, \$1.00



German Iris.

**Princess Victoria Louise.** Standards pure sulphur yellow; falls rich plum color, with cream-colored edges. A new and distinct combination of colors.

**Rhein Nixe.** Standards pure white, falls deep violet-blue, with white margin; will attain a height of 3 feet, with many-branched stems.

## Japan Iris—Kaempferi

The Japanese Iris is quite distinct from all others, and never fails to excite the admiration of all who see it. It is becoming more popular each year. The enormous flowers produced in June and July display a marvelous blending of rich and rare shades. They like a rich soil and plenty of water when in bud and flower. We offer a select collection of named varieties, as well as a very fine mixture.

Mixed, good assortment: Each, 15c; doz., \$1.50

### SELECT NAMED JAPAN IRIS YOUR CHOICE EACH, 20c; DOZ., \$2.00

**Haker-O-Den.** Beautiful, large, six-petaled white.

**O-Sho-Kum.** Deep blue, showing darker veins, six petals.

**En-U No-Sora.** A charming pink shading to rose, six petals.

**Momiji-Ga-Take.** Deep rich blood red, edge of petals lighter, six petals.

**Gei-Sho-Ui.** Bright red, beautifully frilled, six petals.

**Shi-Chu-Ka.** Creamy white shaded and edged carmine, six petals.

**Kumo-Ubi.** Light blue or lavender pencilled yellow to the center.

**Ho-So-Kawa.** Rich royal purple, yellow and white markings in the center, six petals

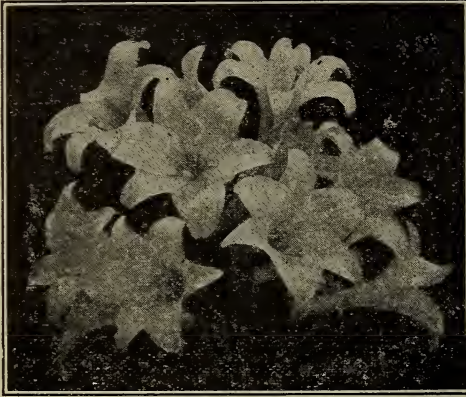
### ENGLISH IRIS

Each, 4c; Doz., 40c  
Each, 3c; Doz., 30c



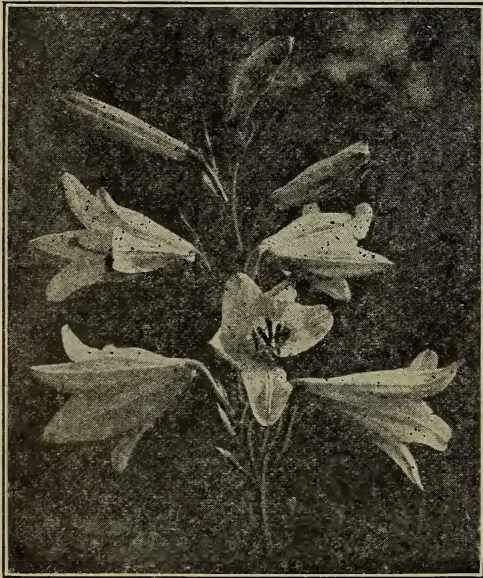
## BEAUTIFUL HARDY LILIES

These are the most fragrant, beautiful and stately of all flowers produced from bulbs; they require very little care. Do not disturb them oftener than every three to five years. Plant about six to twelve inches deep, according to size of bulb, and if the ground is not well drained use plenty of sand around the bulb, and lay it on its side. Plant in clusters or groups of six or more for best effect. The Formosa and Longiflorum Lilies force very easily. The Speciosum are, next to the Auratum, the most magnificent species for outdoor culture. They increase in size and beauty each year.



Eastern Lily—Longiflorum.

**LILIUM LONGIFLORUM.**—More generally known as the "Easter Lily." Thousands are forced by florists for Easter day. Plant one bulb to a 6-inch pot or planted outside they bloom in June or July. Each, 15c; doz., \$1.50; mammoth bulbs, each, 20c; doz., \$2.00.



Candidum Lily.

### LILIUM CANDIDUM—St. Joseph or Madonna Lily

This is the ever popular, fragrant, snow-white, hardy garden Lily. The flowers are produced in clusters, at the top of 4 to 5-foot stems; blooms in the open ground in June. A very hardy and popular Lily. (See Each 15c; Doz. \$1.50; Mammoth Bulbs \$1.20)



Auratum Lily.

**WASHINGTONIANUM** (Mt. Hood Lily). A beautiful lily, native of Oregon; flower of open form; white, tinted with pink; grows 3 to 5 feet high; very fragrant. Three sizes, 15c, 20c, 25c each

### Lilium Auratum (Gold Banded Lily)

The handsomest and probably the most popular of the Japan Lilies. Its immense ivory-white flowers are thickly studded with yellow and crimson spots, while in the center of each petal is a golden band, shading its edges into white; very fragrant. (See cut.)

Each, 15c; doz., \$1.50; mammoth bulbs, 20c; doz., \$2.00.

**AURATUM MACRANTHUM.** One of the most wonderful Lilies in cultivation. The stems attain a height varying from 7 to 10 feet. The flowers are similar in color to Auratum, heavily spotted, but are much larger, the petals more overlapping, and of greatest substance.

Each, 25c; doz., \$2.50

**AURATUM PICTUM.** A most magnificent flower of same shape and color as Auratum above except that one-half of the gold band on each petal is a bright crimson; very rare and showy.

Each, 25c; doz., \$2.50

**AURATUM RUBRUM VITTATUM.** Very large flowers, often one foot across, pure ivory-white, with broad crimson stripe through center of each petal.

Each, 40c; doz., \$4.00

Astoria, Ore., April 3, 1916.

Dear Sirs: The two Dahlia Bulbs you sent on Mar. 27th came and are nice, healthy bulbs. Thank you for sending such large ones.

Respectfully yours,

MRS. F. C. ROWAN.

**SPECIAL OFFER**—One bulb each kind on this and the next page, our entire collection (14 bulbs), VALUE \$3.00, ONLY \$2.25 POSTPAID.



## Lilies—Continued.

**TENUIFOLIUM.** The lovely Coral Lily of Siberia. A great beauty. The brightest of all lilies. Grows 20 inches high, with finely cut foliage, slender stems and beautiful shaded flowers of a very brilliant coral-red. Blooms very early with 12 to 20 flowers per stem. (See cut.)

Each, 15c; doz., \$1.50

## Lilium Speciosum

No words can overestimate the brilliant beauty of this charming variety. Its six broad white or pink petals are thickly dotted with rose or carmine spots, and the graceful form, brilliant color, and exquisite fragrance make this one of the most effective and desirable of the lily family. They are profuse bloomers, and last for many days after being cut and put in water. (See cut.)

**SPECIOSUM ALBUM.** Pure white; flowers freely.

Each, 20c; doz., \$2.00; mammoth bulbs, 25c; doz., \$2.50.

**SPECIOSUM RUBRUM.** White, with dark rose spots.

Each, 15c; doz., \$1.50; mammoth bulbs, 20c

**SPECIOSUM MAGNIFICUM.** A new and rare variety; the finest of all the Speciosums; flowers very large, white, shaded rich blood crimson, heavily spotted; very rich and showy.

Each, 20c; doz., \$2.00; mammoth bulbs, 25c; doz., \$2.50.

**HENRYI (The Yellow Speciosum).** A splendid new rare Lily from the mountains of China. Destined to be the Lily among Lilies. It is so healthy and sturdy, so hardy and beautiful, so easy to grow, that in time it will be in every garden, as the Tiger Lily is now. It grows, when established, 3 to 5 feet high, each stem producing 5 to 8 large rich apricot yellow flowers, banded with green. (See cut.)

Each, 50c; doz., \$5.00



Tenuifolium—Coral Lily.

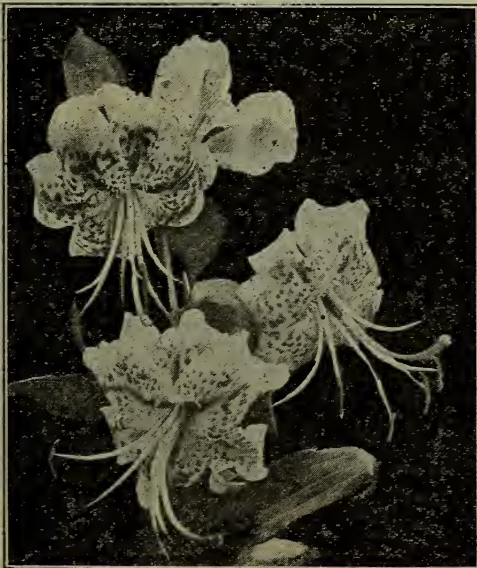
## Tiger Lilies

**TIGRINUM FLORE PLENO (Double Tiger Lily).** A magnificent lily of stately habit, bearing immense clusters of large, double flowers; color bright orange, spotted with black.

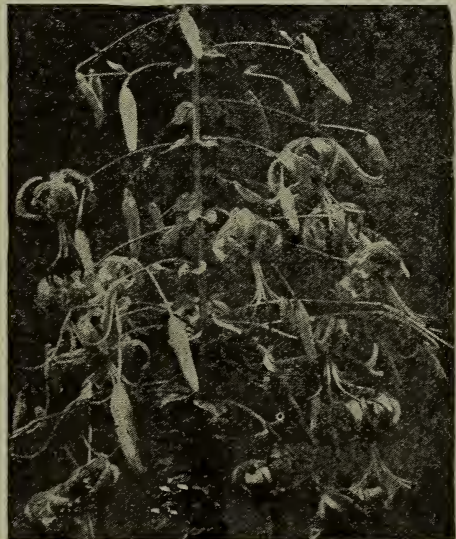
Each, 15c; doz., \$1.50; mammoth size, 20c; doz., \$2.00.

**TIGRINUM SPLENDENS (Improved Single Tiger Lily).** Large flowers of excellent form; color orange salmon, with dark spots; hardy and free bloomer.

Each, 10c; doz., \$1.00; mammoth size, each, 15c; doz., \$1.50.



Speciosum Rubrum.



Lilium Henryi

**NOTE.**—On display at our salesroom we have colored plates of all our lilies, which will give you an excellent idea of just the shape and colors.



## CALLA LILIES

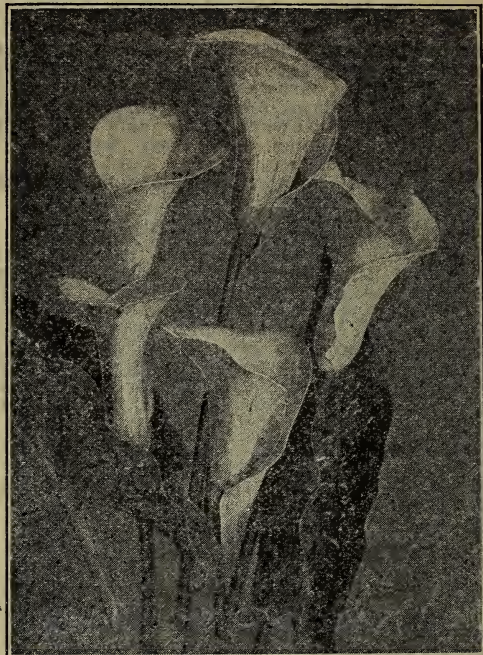
The Calla is one of the best winter flowering plants for room culture, needing little care beyond abundant water and an occasional washing of the leaves to keep them free from dust. Take a 4 or 5-inch pot, fill it with good, rich loam ( $\frac{1}{4}$  leaf mould and  $\frac{3}{4}$  good garden soil), then put in bulb, cover it one inch, water well and set away in a dark place for three or four weeks. As soon as it starts growing bring to the light, give abundance of water, light and heat and the result will be most satisfactory. After blooming, set the pots away and let them dry out until the following fall.

**WHITE CALLA.**—The most extensively grown. Bulbs in season from September to May. Small bulbs, 15c; large, 20c to 25c; extra large, 35c.

**YELLOW ELLIOTIANA.**—This new Yellow Calla is of marvelous beauty. Flowers are large, rich, dark golden yellow, often 4 to 5 inches across the mouth; leaves are beautifully spotted with white. A most valuable bulb for planting inside. Bulbs in stock from November to June. (See cut.) Price, each 30c

## Dad's Electric Lantern.

Everyone has use for this wonderful new light. Sure, safe and useful in a thousand ways. Write for descriptive pamphlet.



Yellow Calla Lily.

## TUBEROSES

A very desirable and most easily grown summer flowering bulb. Easily recognized by its exquisite fragrance and beautiful spikes of white flowers, which are borne on long stems, making it an admirable cut flower for house decoration. If started in pots and then transplanted to open ground, can be had much earlier. For flowering in the open border, plant in the spring after the ground becomes warm.

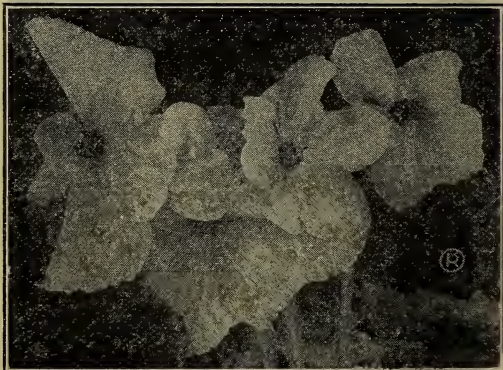
**Excelsior Dwarf Pearl**—select bulbs. Each, 5c; doz., 50c

## TUBEROUS ROOTED BEGONIAS

Excellent for pot culture or planting in lawn beds and borders. They should be grown more extensively than they now are, for they require very little attention and are in flower, out side, from early summer until heavy frosts; inside, potted, they are a constant and prolific bloomer. They will thrive either in full sunshine or in shade, but when fully exposed to the sun the beds must be well watered in hot weather.

### Culture.

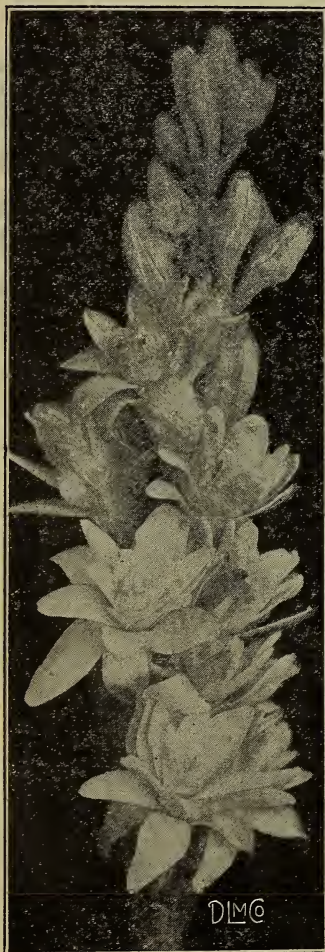
— Before planting, keep the bulbs in a moist, warm place to start them, so that you can tell which is the top. Plant a foot apart in beds or 1 bulb to a 4-inch pot inside, cover about 1 inch.



Tuberous Rooted Begonia.

**SINGLE FLOWERED.**—Separate colors, White, Scarlet, Pink or Yellow. Each, 10c; Doz., \$1.00

**DOUBLE FLOWERED.**—Separate colors as above. Each, 15c; doz., \$1.50



Tube Rose.

**POTTING SOIL**—Ordinary garden soil and "C. M." (see page 37) mixed half and half will give excellent results for potting flowering bulbs.



## CALADIUM ESCULENTUM.

(Elephant's Ear.)

One of the most effective plants in cultivation for beds, borders or for planting out upon the lawn. To obtain the best results it should be planted where it will obtain plenty of water and an abundance of rich compost. When full size it stands 6 to 10 feet high, and bears immense light green leaves, 3 to 4 feet long by 2½ feet wide. For best results start early inside and plant out when ground and weather is warm.

**Mammoth Bulbs**, the only kind it pays to plant, each 25c and 35c.

## TIGRIDIAS.

(Tiger, or Shell Flower.)

These are gorgeous, rare and unique summer-flowering bulbs. They come in all colors of Yellow, Crimson, White, Rose and Spotted and look well associated with Gladioli, Lilies and kindred stock; grow about 1½ feet high, and flower freely throughout the summer. They require the same treatment as Gladioli, and should be lifted in autumn and dried off in the same way. (See cut of flower only.)

Mixed, all colors, each 5c; dozen 50c



Caladium—Elephant's Ear

## AMARYLLIS.

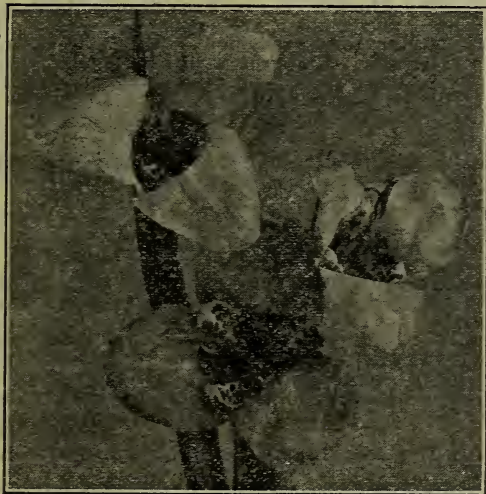
These hardy flowering bulbs are very popular for pot culture and garden. Their giant, lily-like flowers produced on tall stems are exceedingly rich and lasting. For pot culture, 1 bulb to a 6-inch pot. In the garden plant 1 foot apart and cover bulb about 4 inches.

**AULICA OR LILY OF THE PALACE.**—Summer and autumn bloomer. Broad foliage and large spreading wide open flowers of rich crimson scarlet, lined and penciled white and maroon. Blooming bulbs.

Each, 30c; doz., \$3.00

**BELLA DONNA**, the Lovely Pink Bella Donna Lily.—One of the most satisfactory, bearing on long stems clusters of 8 to 10 superb large beautiful pink, lily-like flowers, with a delightful fragrance. A fine fall bloomer.

Each, 25c; doz., \$2.50



Tigridias.

## LILY OF THE VALLEY

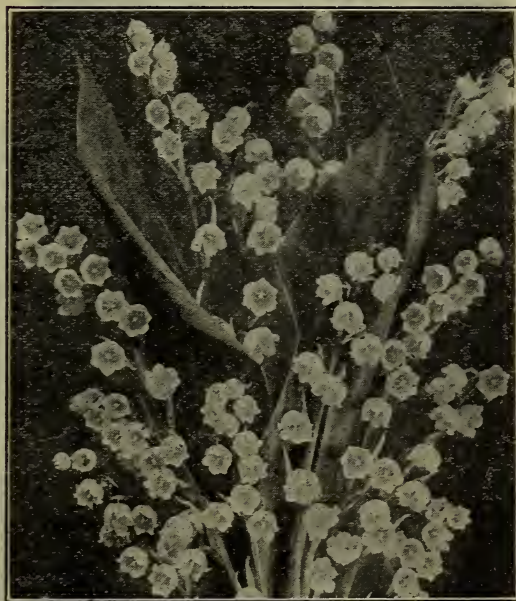
One of the most charming spring flowering plants, producing in profusion its delicate bell-shaped, delightfully fragrant white flowers. Valleys thrive in any common soil, and will do well in shady situations, where few other plants will succeed. Highly prized for cutting purposes, and exceedingly well adapted for flowering in pots in the winter. Can be forced to bloom in four to six weeks from time of planting. Plant 6 pips to a 6-inch pot.

They are perfectly hardy and most charming planted in beds or borders around the lawn, where they can remain, increase and bloom from year to year. Ready from November to March.

**SELECTED PIPS**, for forcing indoors or planting outside.

Each, 5c; doz., 50c; 100, \$3.00

NOTE—Higher in price on account of war.



Lily of the Valley.

Our Fall Catalog of Dutch Bulbs, such as Hyacinths, Tulips, Narcissus, Crocus, etc., which should be planted from October to February, is issued September first. Free on request (see page 71).



## Miscellaneous Summer Flowering Bulbs

### MONTBRETIA

One of the brightest and best of summer flowering bulbs. Plant in clumps of six to twelve bulbs in May or June. They greatly resemble the *Gladiolus* in growth and produce beautiful spikes of star shaped flowers in various shades of orange, yellow and red.

Mixed varieties, 3 for 10c; Doz., 30c

### NEW SPIDER LILY

The flowers have a peculiar and striking beauty, which must be seen to be appreciated. The flowers are borne in large clusters, are of waxy-whiteness and unsurpassed fragrance. More beautiful than most of the high priced Lilies. An extra choice garden flower which comes to us strongly recommended. Also a fine pot plant.

Each, 20c; 3 for 50c

### ZEPHYRANTHES

The Zephyr Flowers or Fairy Lilies, are gems of rare beauty; and when planted either in pots or in the open ground they produce very beautiful Lily-like flowers nearly all summer. For pot culture plant three or four in a 5 or 6-inch pot and they will bloom beautifully. For the garden, plant in spring and lift in the fall, like *Gladioli*. Those who plant them either in pots or the open ground, will be delighted.

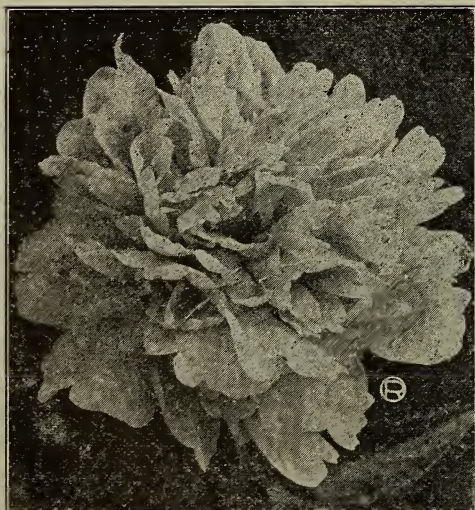
Prices: Each, 10c; 3 for 25c; Doz., 90c

**ROSEA**—Beautiful clear rose; flowers large and very handsome; blooms all summer.

**CANDIA**—Pure white and the most profuse bloomer of all.

## CHOICE HERBACEOUS PAEONIES

Special Collection Offer—1 Each (10 kinds), only \$3.25 postpaid.



**PEONY (D)**—Double Herbaceous. One of the most beautiful flowering plants, blooming in May and June. The new varieties are simply gorgeous. Once planted they increase in size and profusion of bloom. Most desirable and beautiful for hedges, groups or individual planting. Plant in the fall or early spring.

**DELICATISSIMA**—Large and showy, a profuse bloomer; very desirable, a beautiful silvery pink; mid-season. Each 35c

**DUCHESS DE NEMOURS**—Sulphur-white, changing to white when in full bloom. A beautiful well-formed flower.

Each 50c

### SUMMER-FLOWERING OXALIS

Valuable for edging and borders. When planted three inches apart they produce an unbroken row of elegant foliage and pretty flowers; neat and attractive the whole season. They are also splendid when planted in a mass, and make a very showy bed. (1 foot.)

**Everblooming**—Deep green, clover like foliage. Blossoms bright pink and produced all summer and fall.

Mam. Bulbs, Doz., 20c; 100, \$1.00

### HYACINTHUS CANDICANS

#### Summer Hyacinths

A species of *Hyacinth* which blossoms during August and September, growing three to four feet high, with spikes of pendulous, bell-shaped, pure white flowers. Perfectly hardy and can remain in the garden. A bed of a dozen or more bulbs produces a grand effect. They thrive in any situation.

Strong bulbs: Each, 10c; 3 for 20c; Doz., 75c

### GLOXINIAS

**Giant Flowering Hybrids**—A charming summer flowering house plant of very easy culture. Should be given as much light as possible, but shaded from the direct rays of sun. **Emperor Frederick**—Red, with pure white border. **Emperor William**—Violet blue with white throat tinged and spotted, beautifully streaked and spotted. **Defiance**—Rich crimson scarlet. **Mont Blanc**—Pure white.

Each, 15c; postpaid. One of each of the four varieties, 50c, postpaid.

**EUGENE VERDIER**—Beautiful large flowers, light rose, white center. Tall, erect, free bloomer. Very showy and superb.

Each 60c

**FESTIVA MAXIMA**—This truly superb variety, the finest white in cultivation, combines wonderful purity of color, freedom and earliness of flower. Delicate fragrance.

Each 40c

**FELIX CROUSSE**—Brilliant red, ruby center. Large, handsome, full flowers. An ideal variety.

Each 50c

**GLOIRE MUNDI**—Pure white with salmon center. A very free flowering variety. Excellent for cutting.

Each 35c

**LOUIS VAN HOUTTE**—One of the most conspicuous of the dark-colored varieties. Blossoms are freely produced on strong upright stems well above the foliage; color rich dark crimson. Very desirable.

Each 35c

**MADAME DUCEL**—A very handsome free-blooming Pink, with silvery reflex. Fragrant and desirable in every way.

Each 35c

**TRIOMPHI DE PARIS**—A strong-growing, pure white variety with creamy-white center; good bloomer and habit; mid-season.

Each 35c

**TENUIFOLIA FL. PL. (Fringed or Carrot Leaved)**—Distinct; handsome divided foliage; flowers large, very double and of a deep blood-red; a dwarf, compact bloomer.

Each 35c and 50c

### TREE PAEONY

**PAEONY MOUTAN**—A shrub-like variety growing to a height of 4 to 5 feet. The large beautiful semi-double flowers are borne in profusion after the plant gets well established.

Strong imported roots, postpaid, \$1.00; not postpaid, 75c.



## CANNA PLANTS



City of Portland

Everyone knows the value and beauty of Cannas for bedding. Their large, massive, tropical looking leaves and magnificent flowers can not be equalled in any other plant, of such easy culture. Plant in May or June, 18 inches apart in the richest bed you can give them (18 plants required for a 7-foot circular bed).

While there are many varieties of Cannas, we offer only 6 kinds, but they can be depended upon to be the most showy and desirable and especially adapted to Western conditions.

**PRICES**—Plants in season 20c each, \$2.00 per doz. Large plants from 4-inch pots, 25c each, \$2.50 per doz. Except Firebird.

### CITY OF PORTLAND

#### The Best Pink Canna to Date.

Named in honor of the City of Portland. This remarkable new canna is a cross between Mrs. Alfred Conard and Venus. The plants are stately, erect and sturdy; attractive green foliage of the best substance. It is an early, profuse bloomer, doing equally well in hot or cool weather. Flowers, a beautiful glowing "testout" pink, showing a little salmon. **Pronounced by experts to be the finest all-round pink to date.** This superb new canna is especially recommended for our cool Oregon climate (3½ to 4 feet). Not as strong a grower as some varieties and can be set 15 inches apart.

### FIREBIRD—A gorgeous red flowered green leaved Canna.

This is by all means the very best red-flowered, green-leaved Canna today. The flowers are borne in immense trusses, on strong stalks well above the leaves. They are of splendid form, round and shapely. The petals measure and sometimes exceed 2½ inches across, and the color is a clear glistening scarlet, without any streaks, spots or blotches. (4 feet.)

This new canna was shown at the "Rose Festival Center," 1916, and was admired and praised by every one.

**KING HUMBERT**—King of the bronze-leaved Cannas; its mammoth flowers are produced in heavy trusses of gigantic size, and are of a brilliant orange scarlet, while the foliage is broad and massive and of a rich, copery bronze; bold, effective (5 feet).

**LOUISIANA**—Beautiful and showy; green leaves edged bronze, strong and healthy, very fine bloomer. The mammoth flowers are of fine form and a vivid scarlet (4½ feet).

**GREEN CHARLOTTE**—A very showy and effective variety, foliage green, produces handsome clusters and beautiful scarlet flowers, each petal showing a border of rich yellow (4 feet).

**AUSTRIA**—One of the best of the giant flowered orchid type. Foliage beautiful green, strong and healthy. Flowers are of a pure golden yellow showing a few red dots on the inside petals (4 feet).



Canna Bed, Edged With Annuals.

Use "C-M" in making the Canna beds. See page 37



## Routledge's Superb Gladioli Bulbs

Plant 4 inches deep and as close as 6 inches in beds or borders or among the roses or shrubs. Planted at intervals from very early spring until July 1st, they will give a profusion of flowers until the first frosts.

### Choice Mixed Gladioli

Our choice mixture is composed of all large and up-to-date varieties and our customers can depend upon having a large and magnificent variety of colors.

Doz., 75c; 100, \$5.00

### Popular Mixture

This mixture will produce a large variety of flowers at a little expense; unequalled for the price.

First size bulbs, Doz. 50c; 100, \$3.50

Second size bulb, but of blooming age, Doz. 35c; 100 \$2.50

**AMERICA**—Conceded to be one of the finest varieties for cutting or bedding ever sent out; color a beautiful soft flesh-pink.

Each, 5c; Doz., 50c; 100, \$3.25

**ERENCHLEYENSIS**—Vermillion-scarlet; bright and very showy, a great favorite.

Each, 5c; Doz., 50c; 100, \$3.25

**BARON HULOT**—Rich, royal violet-blue. This, when cut in combination with one of the yellow varieties, is exquisite.

Each, 10c; Doz., \$1.00

**CANARY BIRD**—Canary yellow, a very massive spike closely set with flowers.

Each, 12c; Doz., \$1.25

**GLORY**—Each petal is exquisitely ruffled and fluted at the edges. Delicate cream pink with carmine shading on the lower petals; flowers large.

Each, 12c; Doz., \$1.25

**GLORY OF HOLLAND**—Pure white, with slight marking of red in the throat. The best white of moderate price.

Each, 10c; Doz., \$1.00

**GOLDEN KING**—Large flower of clear yellow, with maroon throat. One of most admired of its color; new.

Each, 20c; Doz., \$2.00

**HALLEY**—New; quite early. color delicate salmon pink, healthy and vigorous, truly magnificent.

Each, 10c; Doz., \$1.00

**INDEPENDENCE**—Clear salmon pink, exceptionally robust; rather late bloomer.

Each, 10c; Doz., \$1.00

**JANE DIEULAFOY**—One of the earliest to flower. The lovely creamy white blooms are decorated with a conspicuous blotch of red in the throat, which makes it very attractive.

Each, 15c; Doz., \$1.50

**KLONDYKE**—Soft light yellow, with crimson maroon blotch on each petal; very attractive. Fine for border, not as tall as the average.

Each, 5c; Doz., 50c; 100, \$4.00

**MRS. FRANCIS KING**—One of the largest and most showy varieties. Of great merit. Color is a brilliant scarlet, which attracts attention at once.

Each, 5c; Doz. 50c; 100, \$3.25

**MRS. FRANK PENDLETON, JR.**—All experts agree that this is one of the finest varieties yet introduced. The flowers are of largest size, borne on strong, straight spikes. In color a lovely salmony pink with brilliant deep, red blotches in the throat. Rich and exquisite in every way.

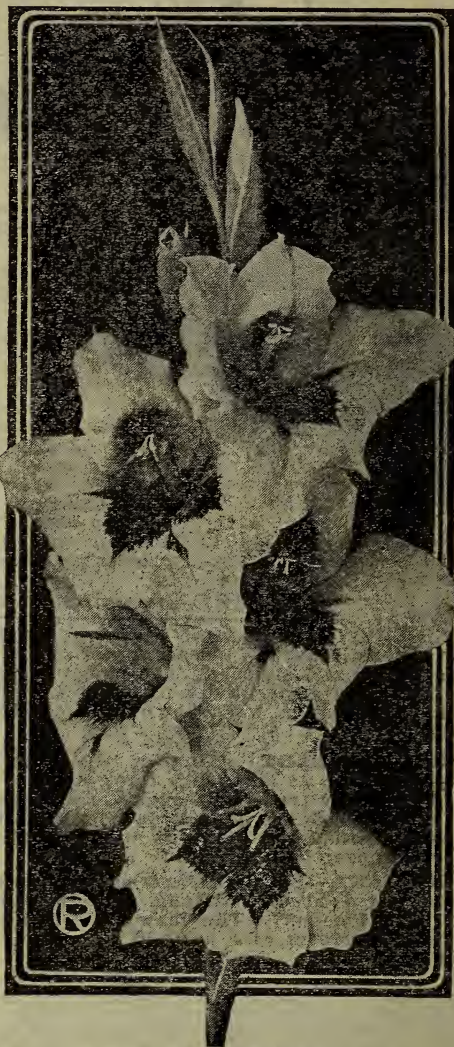
Each, 15c; Doz., \$1.50

**NIAGARA**—A charming American variety, with all the good qualities of America, but of a delicate cream-yellow, lightly marked and splashed with rosy-carmine in the throat; very large, open flowers on tall, straight spikes; beautiful as a cut-flower.

Each, 12c; Doz., \$1.25

**PRINCEPS**—The dazzling scarlet florets are immense in size and beauty. The slight markings of white on the lower petal sets it off to great advantage.

Each, 10c; Doz., \$1.00



Mrs. Frank Pendleton, Jr.

**PANAMA**—An American introduction of sterling merit; is a favorite wherever high grade varieties are grown. It is similar to and has all the good qualities of America, but in color is a rich rose-pink.

Each, 12c; Doz., \$1.25

**PEACE (New)**.—Immense pure white flowers with a touch of carmine in the lower petals. These are borne on tall, graceful spikes; a beautiful and exceedingly refined variety.

Each, 15c; Doz., \$1.50

**PINK PERFECTION**—This magnificent imported sort has attracted great attention at the exhibitions both in this country and in Europe, the color is a soft appleblossom pink with chamomile suffusion that is very attractive, and is considered one of the choicest of the recent introductions.

Each, 15c; Doz., \$1.50

**WAR**—Deep blood red, shaded crimson black; very tall and conspicuous.

Each, 20c; Doz., \$2.00

**VICTORY**—Yellow flushed with pink. Good number of flowers open at one time; very beautiful.

Each, 10c; Doz., \$1.00

**FOR TRIAL**—Full collection of 20 varieties above, each labeled, for only \$2.00 postpaid. We offer Oregon grown, healthy, vigorous, first size bulbs that will give the best results.



## NEW AND POPULAR DAHLIAS

We are large growers of new and up-to-date Dahlias, but do not grow seedlings or out-of-date varieties. We believe in keeping in the front ranks with **quality first**. Wonderful advancements have been made in the different classes of Dahlias in the past few years. Most important is the **lasting qualities when cut, length of stems, upright (not drooping) blooms, size and perfection of flower**. These qualifications constitute our **standard of judging** in our field trials, where we grow thousands without irrigation or special cultivation. If they do well and pass our test **under ordinary farm culture**, they can be depended upon to be **prize winners** under special garden culture.

We believe there are far too many varieties of named Dahlias of ordinary merit, many are almost duplicates; we will endeavor to keep our list down to about 100 of the **choicest varieties**.

### Choice Paeony Dahlias

**Special**.—Our full collection of 14 varieties (value \$5.80), only \$4.50.

**Attraction**.—New, see page 93.

**AMERICA**.—New. A glowing old rose, overlaid with a rich shade of old gold; giant flowers with broad, gracefully twisted petals; long, strong stems. **Each 50c**

**AVALANCHE**.—A new variety of real merit. Large, pure white flowers. **Each 60c**

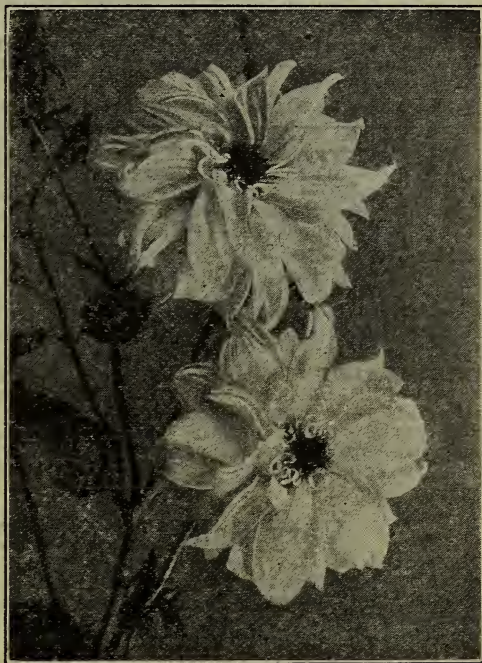
**BERTHA VON SUTTNER**.—Color beautiful salmon pink, suffused yellow; large full, fluffy flowers, good stems **Each 40c**

**DUCHESS OF BRUNSWICK**.—(New)—Flowers bright apricot red, showing some orange. Prize winners in Holland and London. **Each 60c**

**CAESAR**.—A large semi-double flat petaled pure yellow flower, produced freely on long stiff stems. **Each 25c**

**GREAT BRITAIN**.—Magnificent, large, full flowers; graceful; beautiful, clear mauve color. **Each 50c**

**GIANT EDELWEISS**.—Pure white, petals extra long and pointed. **Each 25c**



Leo XIII



Avalanche.

**GEISHA**.—No garden is complete without one of these gigantic flowers. Often ten inches across. The center is yellow, beautifully shaded and suffused scarlet and gold. The petals twist and curl, giving it a graceful, fluffy appearance. **Each 50c**

**HORTULANUS WITTE**.—A giant white of great beauty, the broad, graceful petals are of good substance and of a glistening pearly white; good stems. **Each 35c**

Eureka, Cal., Feb. 2, 1916.  
Dear Sirs: I have to tell you that everything I ever got from you does lovely.

The Dahlias I got from you last year were simply grand. I intend to get some more next year.

Yours truly,  
MRS. ALEXANDER RANKIN.

**HORTULANUS BUDDE**.—Opens a clear, bright crimson, changing to old rose and delicate fawn; broad, velvety petals. A grand, giant flower. **Each 50c**

**LEO XIII**.—A giant yellow, rich, deep and brilliant. The full massive flowers are of ideal form with petals twisted and incurved, making a graceful fluffy flower well poised on strong stems. **Without question the best yellow of its class to date.** Excellent for cutting. **Each 50c**

**P. W. JANSSEN**.—Old rose and salmon-bronze, with dash of yellow to the center. Excellent stems and flowers. Free bloomer. **Each 25c**

**QUEEN EMMA**.—A graceful, flat petaled flower, freely produced on long stiff stems. The best pink in this class. **Each 25c**

**ZEPELIN**.—A beautiful, true, new lavender. Large, well-formed, open flowers, gracefully poised on long, strong stems. Excellent for cutting and decorations. **Each 35c**

For Mixed Dahlias and Special Collections, see page 95.



## New Hybrid Cactus Dahlias

In order to distinguish these giant flowering chrysanthemum shaped Cactus Dahlia from the ordinary cactus type, the National Dahlia Society, at our last Dahlia Show, made a new class to be known as the Hybrid Cactus. This class is often listed as Paeony Dahlias.

These flowers are a cross between the Peony and Cactus type, very large and full and have long, rather broad, curling and full twisted petals in fantastic shapes. The flowers are more than double the size of most Dahlias and very beautiful. Produced on strong stiff stems; make beautiful single specimens for small vases or a gorgeous display in large vases or baskets.

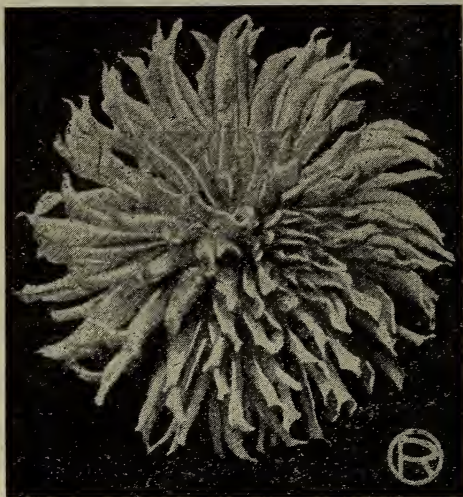
With good cultivation, moisture, fertilizer and disbudding flowers of mammoth size can easily be produced.

Price, Each \$1.00; Collection of 4 for \$3.00

**MRS. WARNAAR**—Giant flowers on long stiff stems. Cream white, suffused delicate pink, the back of the long twisting petals shell pink, giving the flower a very pleasing and beautiful appearance. Award of Merit.

**YELLOW KING**—By far the finest and most beautiful clear primrose yellow to date, mammoth flowers on upright stems; produces in great profusion perfect flowers of elegant shape and style. First class certificate.

**GARRIBALDI**—The very large flowers are very full and perfect in form, with long flat petals that curl and twist in most fantastic style. Color bright scarlet, shading deeper to center, back of petals orange scarlet; very free bloomer. Very graceful and distinct.

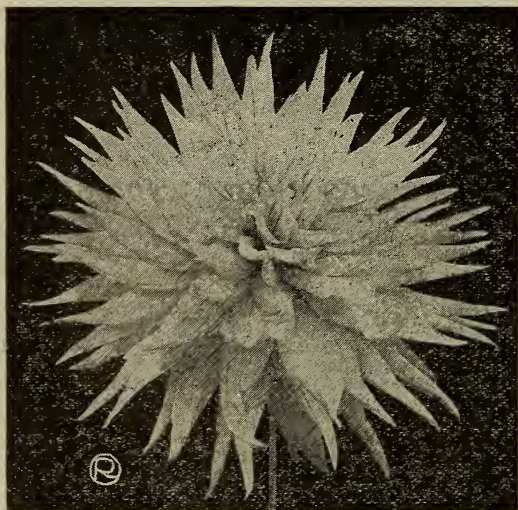


Mrs. Warnaar

**KALIF**—It is an exceptionally strong grower and the large and beautiful flowers are produced very freely and carried on strong, erect stems. The color is a pure scarlet, very rich and glowing.

## Very Select Cactus Dahlias of Decided Merit

As stated before (see top of page 91), we are offering less varieties of Dahlias in each class. A list of several hundred is only confusing and unnecessary. The range of colors, perfection and poise of the flowers, size and profusion of bloom in the following list is unsurpassed. Any one if well grown should be a prize-winner in any show. There is not a poor or inferior variety in the whole list, so you can make a selection to suit your fancy with perfect safety. The prices are within the reach of all.



Mademoiselle Cazalis

**GWENDOLINE TUCKER**—A beautiful shaded silvery pink, large, full flower; petals incurved, carried on long, strong stems. An exhibition variety. Each 50c

**ALFRED NOMBLOT**—Extra large; incurving petals; Geranium red; under side of petals plum, with a golden sheen at base of petals. Very desirable. Each 50c

**COUNTRESS OF LONSDALE**—For perfection of bloom, size, stem, abundance of flowers and lasting qualities when cut, this variety has not been excelled. The color is a rich salmon, tinted apricot. Each 25c

**DUCHESS DE CHANTRES**—An incurved long petaled exhibition variety. The color combination of sulphur-yellow and mauve produce a beautiful pink. Each 50c

**EXTASE**—Beautiful rosy pink, lighter to the center. A grand flower in every way and very large. Each 35c

**FERDINAND CAYEUX**—The darkest Dahlia to date, deep velvety maroon, long pointed petals, extra good stems. Each 50c

**GOLDEN GATE**—A new giant golden-yellow. Highly recommended by eastern growers; profuse bloomer. Should be disbudded and pinched back to secure large perfect flowers. Each 50c

**GOLDREGEN**—Pure yellow; large handsome flowers. An ideal yellow. Each 35c

**GUNTHER**—A splendid pure white Dahlia with broad, twisted petals. Each 25c

**OTHER VARIETIES?**—We are in close touch with all Oregon Dahlia growers and will gladly procure any particular dahlias you want, at prices listed by others.



## Very Select Cactus Dahlias—Continued

**SPECIAL CASH OFFER.**—In collections (of 3 or more bulbs) we will give you \$2.40 worth for \$2.00; \$3.60 for \$3.00, etc., (20c extra on the dollar) collection and dozen prices excepted.

**JACQUELINE GUILLOT**—A beautiful and attractive flower of good size, long stems; blood red, capped or tipped pure white; the best of this type. **Each 25c**

**JOHN RIDING**—Dark rich scarlet; long florets; incurving over the center of the flower; best of its color. **Each 50c**

**MANON**—Extra large flowers, sulphur-yellow shading to primrose at points of petals. A free bloomer. **Each 25c**

**MADEMOISELLE CAZALIS**—Pure white flower, perfect in form, large, very full; very free bloomer. **Each 35c**

**MERCURY**—Beautiful large full flowers. Petals fine and pointed, incurving. Coral red, deeper to the center. **Each 35c**

**MODELL**—Yellow, with a delicate plum bluish sheen over tips of petals; a dainty, lovely flower of large size, perfect form; erect on long stems. **Each 35c**

**MONSIEUR CAZALIS**—White, overlaid with violet rose, producing a lavender shade. Very desirable. **Each 25c**

**MONSIEUR BARAT**—A large and beautiful flower; color, white, striped and lined purple and violet, making it very showy. **Each 50c**

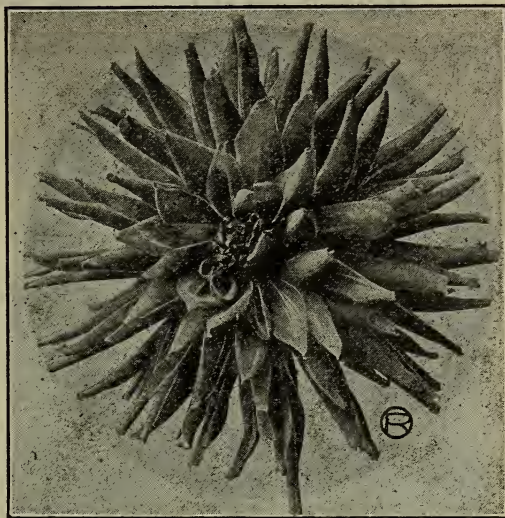
**MRS. DOUG. FLEMING**—Without doubt the best white Cactus Dahlia. Petals long and tubular and so numerous as to make massive flowers. Exhibition variety. **Each 60c**

**MAD. HENRYI CAYEAUX**—Of premier merit, elegant form. A beautiful, tender rose. Petals long, white tips. **Each 50c**

**MRS. HENRY WIRTH**—This splendid variety is in full bloom from early until late, full double flowers of intense rich glowing scarlet. **Each 25c**

**MRS. FERDINAND JEFFRIES**—Long petals curved and twisted; beautiful and full; deep velvety red. **Each 35c**

**NEW YORK**—Rosy salmon-orange color, with bronzy shadings. One of the largest, held erect on long, strong stems; perfectly free bloomer. **Each 50c**



Rene Cayeux

**RENE CAYEUX**—An early, continuous and free bloomer. Flowers borne well above the foliage. For a hedge or a mass effect it could not be equaled. A rich, bright red. Bushes rather dwarf. **Each 25c**

**SEQUOLA**—Deep saffron-yellow, with long tubular petals cleft at the tops. **Each 25c**

**UNCLE TOM**—Free bloomer; deep crimson, almost black; excellent shape. **Each 25c**

**VIOLA**—A full well-shaped flower, very rich and desirable. Violet purple. **Each 35c**

**WM. MARSHALL**—Flowers extra large, fine form, long twisted petals. Color yellow overlaid and shaded orange. **Each 35c**

## New Dahlias of Wonderful Merit for 1917

These new varieties are for those who want the "very latest introductions of distinctive merit." There are so few tubers of these in the United States that only pot-grown plants can be supplied.

### ST. LEONARDS

See illustration back cover.

A wonderful new Cactus Dahlia. Flowers of great beauty, large, perfectly formed, long petaled, and held proudly, erect and upright on long stiff stems, well above the foliage.

The poise of the flowers on the stems are perfect. One does not need to lift the flower or stoop to look into the beautiful face of St. Leonards; this makes it doubly valuable for decorative garden effect or vase displays.

The color combination in St. Leonards is new and wonderful; we have never seen it in any other Cactus variety. It shows the pleasing, attractive and distinct color of the popular Geisha Paeony Dahlia. The body color is a clear but soft yellow, one-half of petals suffused with bright red, which becomes almost solid scarlet at the tips. No description can do it justice; it is impossible to describe the beautiful and gorgeous effect. St. Leonards is a profuse and constant bloomer and a good keeper, lasting 3 to 5 days as a cut flower.

It seems to be an unusually hardy variety, as early frosts that cut down and ruined

most other kinds, early last fall, did not effect this rare and worthy English novelty.

**Each \$2.50**

**ATTRACTION**—A grand 1916 Paeony novelty from Holland. The handsome, mammoth flowers are freely produced on long, strong stems, color light rosy pink, with a delicate sheen of lilac. An exhibition flower. **Each \$1.50**

**CAPTAIN SCOTT** (Keynes, introduced in England, 1915; in America, 1916).—Pure snow white florets very long and narrow. Strong upright stems. Good free bloomer. The largest and best white Cactus to date. **Each \$1.00**

**GENERAL SMITH-DORRIEN**.—Bright fiery scarlet, very large, florets very long and slightly incurved. Bushy plant about four feet high. A mass of bloom all summer. Strong, erect stems. (Keynes, 1916.) **Each \$1.00**

**CAMBRIAN**—Clear, delicate salmon pink; florets narrow, long and slightly incurved. Fine for exhibition and garden. Habit and flower stem good. (Stredwick, 1916.) **Each \$1.00**

Plant supply of above limited, so order early for delivery at proper time.



## Decorative Dahlias

Many beautiful varieties have been introduced, some with flat petals, others reflexed, incurved or curiously twisted, but nearly all are without formality or stiffness, and practically all of them are leaders as cut flowers, bearing their blooms on long, stiff stems.

**Prices**—Unless otherwise priced, your choice 25c each; 6 varieties, \$1.25.



**Delice**

**DELICE**—A beautiful glowing rose-pink. Perfect shaped flowers on long, stiff stems. Excellent for cutting. (See cut.) **Each 35c**

**GAILETY**—A superb new vivid scarlet, beautifully tipped with pure white.

*Mary Island Light Station,*

*Ketchikan, Alaska, Mar. 6, 1916.*

*Gentlemen: Last year I got some Dahlia Bulbs. All grew fine and were just as fine as any one could wish to see when in bloom.*

**ARCHIE McCLELLAN.**

**HORTULANUS FIET**—New. Of mammoth size. A rich and pleasing apricot shading to old gold. Beautiful flowers on good stems. **Each 50c**

**LE GRAND MANITO**—A most effective fancy variety of splendid shape and very large, shaded, striped and blotched with deep red and violet, some flowers may be solid color.

**MEADOW GOLD**—Flowers large and produced in great profusion. Primrose yellow, tinged delicate pink.

**MINNIE BURGLE**—The finest cut flower Dahlia yet produced and very popular with florists. The large yet graceful blooms are carried on long, strong, erect stems; color rich glowing crimson. **Each 50c**

**MME. JEANNE CHANTRE**—Rich pink or bright rose, shading to a creamy white. Grand, showy and pleasing flowers on strong stems. **Each 35c**

**PERLE DE LYON**—A valuable white decorative Dahlia for cut-flower purposes; of good size and held erect on long, stiff, wiry stems, superior to Mrs. Winters.

**PRINCESS JULIANNE**—Award of Merit, Amsterdam, and London. Flower large, full, pure white, perfect shape, stands erect on long, stiff stems and lasts for days. **Each 35c**

**REISE VON STUTTGART**—Sport from Souvenir de Gustave Doazon. A bright blood-red, shading deeper to the center.

**SOUVENIR DE GUSTAVE DOAZON**—The immense flowers are borne in profusion; color bright red.

## Show Dahlias—Quilled

Very beautiful and desirable. Excellent for cutting. Stand handling and shipping well. In shape they are rather round or ball-shaped, and the petals are generally quilled (see illustration below).

**PRICES**—Unless otherwise priced, your choice 20c each, 6 varieties \$1.00, postpaid.

**BALZAC**—Extra large perfect flowers, dark velvety maroon, very rich. **Each 35c**

**CALEB POWERS**—Early, free bloomer. Good size, soft pink, splendid form.

**DIADEM**—Very large, of fine form on long stems; a beautiful rich crimson.

**DREER'S WHITE**—A pure glistening white. Free flowering and most valuable for cutting and show.

**GRAND DUKE ALEXIS**—Very popular and always in demand. Color, ivory white, lightly tinged rosy lavender on edge of petals. **Each 25c**

**LE SIAM**—A grand flower, same style and shape as the popular W. W. Rawson, but of a rich, silvery rose. Free bloomers and good stems. **Each 35c**

**LUCY FAWCETT**—Sulphur-yellow, flaked crimson. Fine large flowers, very full.

**THOMAS PENDRED**—Without doubt the finest yellow show Dahlia ever offered.

**W. W. RAWSON** (See cut.)—Large, perfect but graceful flowers are borne on long, stiff, erect stems. The color is pure white, overlaid with amethyst-blue, producing a beautiful effect. **Each 35c**



**W. W. Rawson**

**OTHER VARIETIES?**—We are in close touch with all Oregon Dahlia growers and will gladly procure any particular Dahlia you want; send price listed at by others.



## Single Flowered Dahlias of Merit

This class of Dahlias has become quite popular of late; they are showy in the garden, very free flowering and excellent for cutting and general decorating.

**PRICES**—Your choice, each 25c. Full collection (5 kinds), \$1.00 postpaid.

**CARDINAL CENTURY**—Very large, bright cardinal red with round petals.

**FRAU DE NEBELTHAU**—The best pure white, excellent stems, large flower.

**MRS. J. C. HANCE**—Large, well rounded flowers; white slightly flushed with soft pink.

**ROSE PINK CENTURY**—Largest and best deep pink with long stiff stems; fine for cutting.

**ROTGOLD**—Bright red, centered with a broad, yellow zone; very attractive. Giant flowers on long stems.

## French Collerette Dahlias

An entirely distinct type, having a row of artistic petals around the disc, which form a frill or collar and which is of a different color from the rest of the flower. Excellent for cutting, have good stems, last well in water and the fall rains do not discolor them. (See cut.)

**PRICE**—Your choice 25c each, 6 for \$1.25.

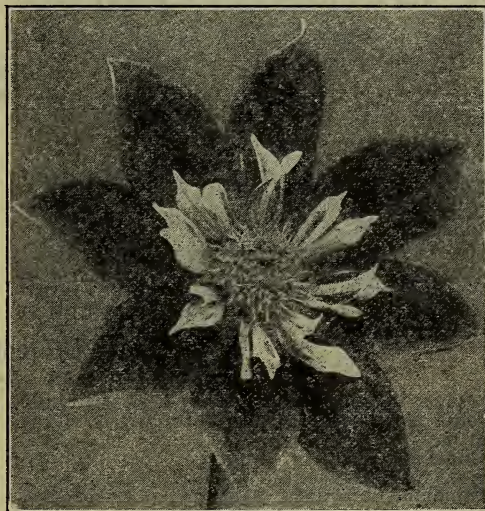
**EUREKA** (Diadem)—Perfect pointed petals of brilliant carmine; collar white. Very pretty. (See cut.)

**EXPOSITION DE LYON**—Very gay; bright garnet; collerette cream-yellow; very attractive; free bloomer.

**IDEAL**—Cardinal red, collerette yellow, very attractive.

**M. MARTINET**—Very large, vermillion shaded yellow; collerette yellow.

**PRINCESS LOUISE**—Rich glowing, crimson; broad flat petals and white collerette, very distinct.



Eureka (Diadem)

**WINDSOR**—Pale chrome yellow, suffused with rosy pink. Straw colored collerette.

## SPECIAL COLLECTIONS

### Dahlia Collections and All Kinds Mixed

If you are not particular as to just what named varieties of Dahlias you plant, as long as you get good kinds, you can save money by buying the following collections. Naturally these will be varieties that we have in surplus, but all will be popular, well-known varieties, that will give choice flowers at a small cost.

#### CACTUS DAHLIA SPECIAL

Our selection of varieties all labeled, but your selection of colors in shades of **White, Yellow, Pink or Red**—6 for \$1.25, 12 for \$1.75. This enables us to use surplus stocks, even though they may be our high priced varieties.

#### DECORATIVE DAHLIAS

We will select for you six choice varieties all different and correctly labeled for \$1.00. You can name colors preferred and we will comply as near as possible.

#### SHOW DAHLIAS

Every bulb correctly labeled. Our selection 6 kinds 85c.

#### PAEONY DAHLIAS

Every bulb correctly labeled. Our selection 6 kinds \$1.25; 6 new kinds 35c or over \$1.75.

#### MIXED DAHLIAS

This is a mixture of all classes, **Cactus, Paeony, Show, Decorative, Single and Collerette**, a wide range of all colors—(unlabeled). 6 for 65c, 12 for \$1.20, postpaid.

**DAHLIA CULTURE**—When you get your bulbs, put them in a warm place and keep them moist so as to start an eye or sprout. Some varieties sprout quicker and earlier than others, but do not plant until they start, then you will have no vacant places. When you plant, remove the label and fasten it to a stake beside the bulb. We attach copper-wired wooden labels that will last for a season.



## CHOICE ROSE PLANTS

For Spring and Early Summer Planting  
Only and Not for Fall Delivery.

On this page we are offering four choice collections of the finest roses. This is the popular mail order size that we send by mail prepaid. They are grown in 3-inch pots, are strong, healthy and well rooted, and from 10 to 12 inches high. They should not be planted outside before severe weather is over in the spring. While this size will not produce so many blooms the first season as our large field-grown plants offered on the following pages, you will be surprised at the results you can obtain, and at quite a saving in prices.



Sunburst

### Ophelia Collection of New Roses

Price 20c each. Set of 6 sorts \$1.00.

**BRITISH QUEEN.**—A grand new Gold Medal rose from Ireland. Pure white. The highest order of merit.

**DUCHESS OF SUTHERLAND.**—Strong grower; handsome, large flowers. Beautiful rose pink with lemon shadings on base of petals.

**GEORGE DICKSON.**—Very large, full and perfectly formed flowers freely produced. Color, blackish crimson of velvety texture. A magnificent rose invaluable for exhibition.

**OPHELIA.**—Salmon, flesh, shaded rose, base of petals apricot yellow. Fine shaped flowers. Excellent habit.

**SUNBURST.**—Without doubt the finest yellow rose in existence. Large buds and flowers of an orange-copper color shaded golden yellow. Superb.

**WILLOMBERE.**—A splendid new rose. Buds coral red, suffused with carmine opening into a large, full flower of a rich shrimp pink shaded to yellow in the center.

### Kaiserine Collection Choice Roses

Price 15c each. Set of 12 sorts, \$1.25.

**Betty.**—Coppery pink; long, beautiful buds.

**Dean Hole.**—Bright carmine with silvery shadings.

**American Beauty.**—Large rosy crimson flowers; sweet-scented.

**Kaiserine Augusta Victoria.**—Large pure white; very free and constant.

**Lady Battersea.**—Bright cherry crimson, long pointed buds.

**Mad. Abel Chatenay.**—Salmon pink, shaded darker. Always in bloom.

**Mad. Caroline Testout.**—The famous Portland rose. Large, bold, bright pink flowers.

**Maman Cochet.**—Beautiful rosy pink. Long pointed buds.

**Richmond.**—Crimson scarlet buds. A beautiful free flowering variety.

**Souv. de P. Notting.**—Rich yellow, bordered pink.

**Souv. de President Carnot.**—Shell pink and fawn.

**White Maman Cochet.**—Pure white; elegant buds.

### Rainbow Collection Everblooming Roses

Price 15c each. Set of 12 sorts, \$1.25.

**Bon Silene.**—Dark rosy carmine; an old standby.

**Duchess de Brabant.**—Rosy pink with silvery shadings.

**Duchess of Albany.**—Deep pink; large and globular.

**La France.**—Silvery pink, large and very sweet-scented.

**La Detroit.**—Shell pink; large, massive flowers.

**Marie Van Houtte.**—Light yellow, flushed carmine.

**Papa Gontier.**—Cherry red, shaded yellow. Grand bedder.

**Rainbow.**—Creamy pink striped and mottled crimson.

**Safrano.**—Apricot yellow, tinged fawn; beautiful buds.

**Virginia R. Coxe** (Gruss an Teplitz).—Fiery scarlet.

**Viscountess Folkstone.**—Delicate flesh pink; full and handsome.

**White La France.**—Blush white, finely formed.

### Glorie Collection Hardy Roses

Price 15c each. Set of 12 sorts, \$1.25.

**Anna de Diesbach.**—Beautiful, clear carmine pink.

**Baron de Bonstettin.**—Dark, rich red; very large.

**Clio.**—Massive, light pink flowers.

**Conrady F. Meyer.**—Beautiful silvery pink.

**General Jacqueminot.**—Bright crimson; one of the best.

**Glorie Lyonnaise.**—Chamois yellow; full, sweet, distinct.

**Margaret Dickson.**—Ivory white, shaded flesh.

**Mrs. R. G. J. Crawford.**—Silvery pink; fine form.

**Mrs. John Laing.**—Soft, delicate pink; free flowering.

**Paul Neyron.**—Large, deep rose; double and handsome.

**Prince Camille de Rohan.**—The best dark maroon.

**Ulrich Brunner.**—Rich, glowing crimson; large.

### Climbing or Pillar or Rambler Roses

We can supply most of our climbing roses in one-year-old plants at 15c each, 4 for 50c. Make your selection from varieties described on page 100.

**REMEMBER**—These pot grown rose plants can be supplied in the spring and early summer months only.



## Choice Field Grown Rose Bushes

We make a specialty of Rose Bushes and sell thousands upon thousands. Our bushes are strong, healthy field grown stock, well rooted, and will produce a profusion of bloom the first season, if given good care and cultivation. We enjoy the reputation of supplying the best stock at reasonable prices. The following list is the choicest of American and European introductions.

### SHIPPING AND DELIVERY.

We can fill orders for our large two-year-old rose bushes any time from October to May—the best planting time is during favorable weather in November, December, January, February and March. One-year-old from March to July. See special collections page 96.

**WE PRUNE THE TOPS** of all bushes sent by mail as they carry better. If all rose bushes when set out were cut back to within 10 or 12 inches of the ground, results would be better than when tops are left on.

### Abbreviations

**T.—TEA**—One of the best classes of Roses and truly ever blooming. They are hardy in this section, although during our coolest weather and in cold sections they should be protected with a covering of fir boughs, straw or burlap.

**H. T.—HYBRID TEA**—Most of these are as free flowering and as constant bloomers as the teas, and are hardier, stronger growers.

**H. P.—HYBRID PERPETUAL**—The hardiest of all roses, vigorous in growth, free blooming.

**AMERICAN BEAUTY (H. P.)**—Constant bloomer, magnificent buds; large, bold flower; color rich, rosy red.

Each 35c and 50c

**AUGUSTUS HARTMANN (H. T.)**—Brilliant geranium red flushed with orange. It obtained the silver medal on many occasions as "the best bloom in the show," and N. R. S. gold medal.

Each \$1.00

**AVOCA (H. P.)**—Brilliant, velvety-crimson; buds long; flowers large, sweetly perfumed.

Each 35c and 50c

**BARONESS ROTHCHILD (H. P.)**—Large size, fine globular form; color bright rosy pink.

Each 35c and 50c

**BRITISH QUEEN (H. T.)**—Pure white, large full flowers of exquisite form.

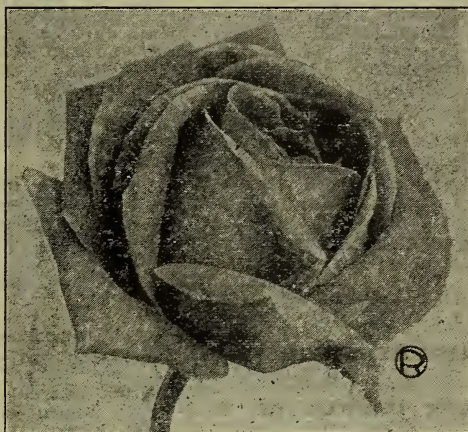
Each 50c and 60c

**CHATEAU DE CLOS VOUGEOT (H. T.)**—A very rich, fiery scarlet shading to deep velvety crimson. It is delightfully fragrant, a prolific and continuous bloomer.

Each 50c and 60c

**CORONATION (H. T.)**—Large exhibition rose; delicate flesh pink shaded to shrimp pink.

Each \$1.00



George Dickson

**DUCHESS OF SUTHERLAND (H. T.)**—Color, warm rosy pink with lemon yellow shadings. A grand exhibition rose.

Each 75c

**DUCHESS OF WELLINGTON (H. T.)**—Intense saffron-yellow, later becomes deep coppery yellow; delightful fragrance.

Each 60c

**DOROTHEA PAGE ROBERTS (H. T.)**—Coppery pink suffused with apricot yellow, very free and profuse bloomer.

Each 50c and 60c

**EDWARD MAWLEY (H. T.)**—Of grand size and build and a free bloomer. Color intense crimson scarlet and of velvety texture.

Each 50c and 60c

**FRAU CARL DRUSCHKI (H. P.)**—A large, grand, hardy, pure white; best and most popular.

Each 25c, 35c and 50c

**FLORENCE PEMBERTON (H. T.)**—Creamy white, suffused pink; flowers very large and full.

Each 35c and 50c

**GENERAL McARTHUR (H. T.)**—Color, brilliant scarlet; beautiful buds and most desirable in every way.

Each 35c and 50c

**GENERAL JACQUEMINOT (H. P.)**—Bright shining crimson scarlet; very rich and velvety; one of the best.

Each 25c, 35c and 50c

**GEOFFREY HENSLOW (H. T.)**—A delightful orange-crimson of great brilliancy. A good exhibition flower; distinct; deliciously pure rose perfume.

Each 50c and 60c

**GEORGE DICKSON (H. T.)**—A velvety blackish crimson with the back of the petals heavily veined with pure crimson maroon. Pronounced by all who have seen it to be unequalled to date.

Each 75c

**HIS MAJESTY (H. P.)**—The Crimson Frau Karl Druschki. Dark, deep crimson, shaded deep vermilion-crimson towards the edges; of great size.

Each 40c and 50c



Coronation—New.

**DOZEN PRICES.**—We give you our 35c selected two-year-old bushes at \$3.00 doz.; our 40c and 50c extra selected at \$4.00 doz. We can supply the ordinary grade of 25c bushes at \$2.50 doz. All charges prepaid. (1-year pot roses, pg. 96.)



**HUGH DICKSON (H. P.)**—Brilliant crimson, shaded scarlet; good size and fine form; finely perfumed.

Each 35c and 50c

**IRISH ELEGANCE**—Bronze orange in the bud, opening into large single flowers of a lighter shade.

Each, 50c

**IRISH FIREFLAME** (Dickson & Sons, 1914.)—These buds are wonderfully rich in coloring; opening to a large single flower Old gold, shaded ochre.

Each, 60c

**JULIET (H. P.)**—Very attractive; inside of petals golden yellow, outside rosy red; large, full, fragrant.

Each, 35c and 50c

**JONKEER J. L. MOCK (H. T.)**—A magnificent and unique rose. Inside of petals red, outside bright pink.

Each, 40c and 50c

**J. B. CLARKE (H. T.)**—Deep dark scarlet, large and beautiful.

Each 35c and 50c

**KAISERIN AUGUSTA VICTORIA (H. T.)**—Beautiful buds and flowers; creamy white; deliciously fragrant.

Each 25c, 35c and 50c

**KILLARNEY**—It mildews so badly we recommend Madame Leon Pain.

**KING GEORGE (H. T.)**—A new rose of great merit; blackish-crimson with deep velvety-violet flush.

Each, 60c

**LA FRANCE (H. T.)**—Very popular. A beautiful silvery pink.

Each 25c, 35c and 50c

**LADY ASHTOWN (H. T.)**—Rare, rich, large silvery pink yellow-toned.

Each, 50c and 60c

**LADY HILLINGDON (H. T.)**—Deep apricot yellow, long pointed bud.

Each, 50c and 60c

**LADY URSULA (H. T.)**—Truly magnificent; a delightful shade of flesh pink.

Each, 40c and 50c

**LYON ROSE (H. T.)**—Distinct. Shrimp pink with salmon and chrome yellow shadings, beautiful beyond description.

Each 50c and 60c

**MABEL DREW (H. T.)**—A magnificent rose, exquisitely shaped; deep cream, passing to intense canary-yellow in the center.

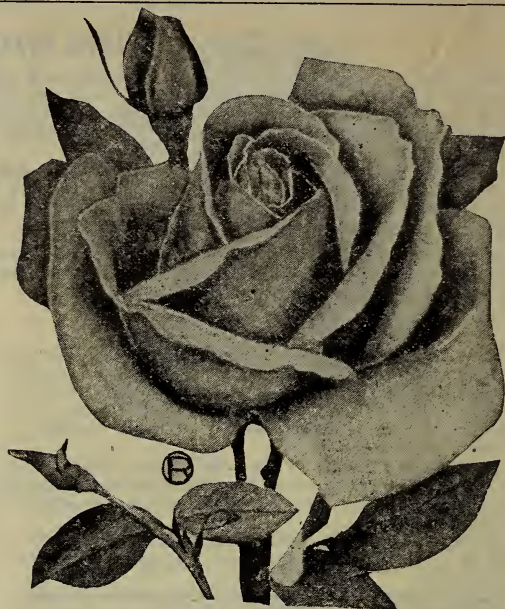
Each, 60c

**MADAME CAROLINE TESTOUT (H. T.)**—Portland's famous brilliant pink rose.

Each 25c, 35c and 50c

**MADAME EDOUARD HERRIOT**—Long pointed buds, a deep coral red color shaded to yellow at the base; flower of a rare shade of rosy scarlet flushed with shrimp and apricot tints. Won the Daily Mail's \$5000 gold cup.

Each \$1.00



Mad. Eduard Herriot

**MAD. MAURICE DE LUZE (H. T.)**—Rich, rose pink carmine.

Each 40c and 50c

**MAD. MELANIE SOUPERT (H. T.)**—Saffron yellow suffused with carmine and pink. A great favorite.

Each 40c and 50c

**MADAME LEON PAIN (H. T.)**—A beautiful salmon-pink overlaid with silvery-white, center yellow. Similar, but better than Killarney.

Each 35c and 50c

**MAD. SECOND WEBBER (H. T.)**—A magnificent light rosy salmon. Buds long and pointed, flowers immense.

Each 40c and 50c

**MADemoiselle CECILE BRUNNER**—Dwarf Polythanas. Exquisite little roses, buds dainty, pointed, bright salmon pink, yellow center.

Each 35c and 50c

**MAMAN COCHET (T.)**—Very popular; a deep, rosy pink, the inner side of petals silvery rose.

Each 35c and 50c

**MARIE VAN HOUTTE (T.)**—Straw-yellow color; outer petals shaded bright rosy carmine.

Each 35c and 50c

**MELODY (H. T.)**—Yellow, deepening to apricot in the center; perfect in form, free bloomer.

Each 60c and 75c

**MARQUISE DE SINETY (H. T.)**—Beautiful golden-yellow shaded rosy-red delightfully fragrant.

Each 50c and 60c

**MISS ALICE DE ROTHSCHILD (T.)**—Often called bush Marechal Neil. Rich, deep citron-yellow; deliciously fragrant.

Each 60c and 75c

**MISS CYNTHIA FORDE (H. T.)**—A deep brilliant rose-pink, very large; sweetly perfumed. Gold medal N. R. S.

Each 60c and 75c

**MILDRED GRANT (H. T.)**—Large and beautiful, silvery white, shaded peach.

Each 40c and 50c

**MRS. AARON WARD (H. T.)**—Very distinct. Coppery orange in the bud, shading to gold and pink.

Each 50c and 60c

**MRS. A. WADDELL (H. T.)**—Color, deep reddish apricot toned with salmon; long pointed buds.

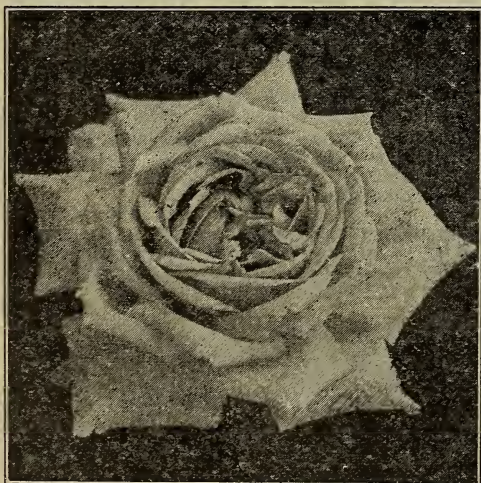
Each 35c and 50c

**MRS. FOLEY HOBBS (T.)**—A veritable giant among Tea roses; delicate ivory white tinged pink on edge of petals; deliciously scented.

Each 50c and 60c

**MRS. FRANK BRAY (H. T.)**—A rich deep coppery ecru, developing as the flower opens to a very delicate coppery-fawn with a shading of ivory shell-pink.

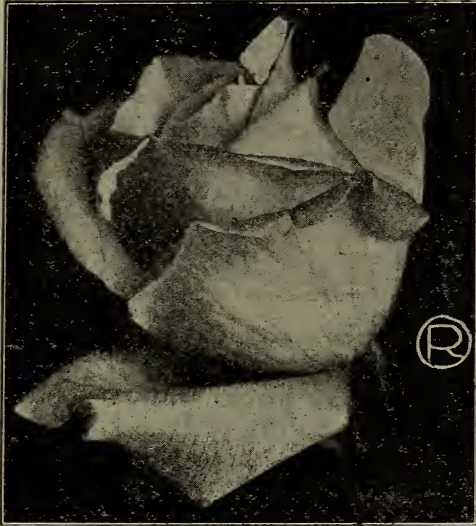
Each 50c and 60c



Miss Cynthia Ford

**DOZEN PRICES.**—We give you our 35c select two-year-old bushes at \$3.00 doz.; our 40c and 50c extra select at \$4.00 doz. We can supply the ordinary grade of 25c bushes at \$2.50 ruary and March. One-year-old from March to July. See Special Collections, pg. 96.





Mrs. Foley Hobbs (Bud).

**MRS. MUIE MACKEAN (H. T.)**—A new rose of special merit; unique and quite distinct; bright carmine crimson, without shading. A grand exhibition and garden rose. Each, 50c and 60c

**MY MARYLAND**—This rose is little less than marvelous; a bright glowing pink, each petal being shaded lighter at its base. Each, 35c and 50c

**OLD GOLD (New)**—A vivid reddish orange with rich coppery red and coppery apricot shadings. Long dainty buds lasting a long time in perfect condition. Each, \$1.00

**OPHELIA (H. T.)**—A beautiful new rose of perfect shape. Creamy white shaded peach or apricot. Greatly admired at our 1915 Rose Festival. Each, 60c and 75c

**PAPA GONTIER (T.)**—Vivid cherry red color, shaded yellow. Prized highly for its beautiful pointed buds. Each 35c and 50c

**PAUL NEYRON (H. P.)**—Deep, shining rose; a giant in size. Each, 35c

**PERLE DES JARDINS (T.)**—Beautiful, clear, golden yellow, entirely distinct from any other variety. Each 35c and 50c

**PERLE D'OR (Dwf. Poly.)**—Exquisite and dainty. Nankeen yellow with a deep orange yellow center. One of the prettiest of small flowered polyantha roses. Each, 50c

**PINK DRUSCHKI (H. P.)** Heinrich Munch).—Immense globular flower of a beautiful silvery-pink color. On account of its size and color this variety will soon gain the same popularity as the famous white Frau Karl Druschki. Each, 60c and 75c

**PRINCE CAMILLE DE ROHAN (H. P.)**—Very dark, rich, velvety crimson, passing to intense maroon, shaded black; the best dark variety. Each, 35c and 50c

**RAYON D'OR OR GOLDEN RAYS (H. T.)**—A gorgeous new golden-yellow rose superb. Each, 60c and 75c

**REEA REID (H. T.)**—Long buds, large flowers; color, a vivid scarlet. Each, 35c and 50c

**RICHMOND (H. T.)**—A magnificent, rich scarlet-crimson; ever-blooming rose. Each, 25c, 35c and 50c

**SAFRANO (T.)**—Bright apricot yellow, tinged orange; beautiful buds; delicious tea scented. Each, 35c and 50c

**SUNBURST (H. T.)**—Rich cadmium yellow, shaded orange. The buds are very long and beautiful form, opening into a gorgeous colored flower. Each, 50c and 60c

**ULRICH BRUNNER (H. P.)**—Glowing crimson, flamed with scarlet; a good grower and free bloomer. Each, 25c, 35c and 50c

**WILLOMERE (H. T.)**—An improvement upon the famous Lyon Rose, more vigorous, stronger stems. Long, elegant buds, coral red suffused with carmine, opening into a large full flower of a rich shrimp pink, shaded to yellow at the center. Each, 75c and 85c

**WHITE MAMAN COCKET (T.)**—White, shaded pink on edges of petals; very beautiful. Each, 35c and 50c

**WHITE KILLARNEY.**—Beautiful flowers, elegant buds, delicious fragrance. Each, 35c and 50c

**WINNIE DAVIS (H. T.)**—Rich apricot-pink, shaded to flesh. Beautifully formed buds and flowers. Each, 35c and 50c

## Standard or Tree Roses

Tree Roses are budded or grafted on hardy rose stocks, about four feet high. They soon make good-sized heads, forming a small tree, especially desirable for planting as single specimens in back grounds or rows along walks or driveways.

Not all varieties are obtainable, but order any color or variety you wish, and we will send it or give you as good a substitute in same color as possible.

Prices, \$1.00 to \$1.50 each, according to size and shape of head. (Cannot be mailed.)

## Weeping Tree Roses

These are produced by budding the trailing varieties on four or five-foot standards. They are very showy and quite a novelty.

Each, \$1.50 to \$2.00 (Cannot be mailed.)

## Moss Roses

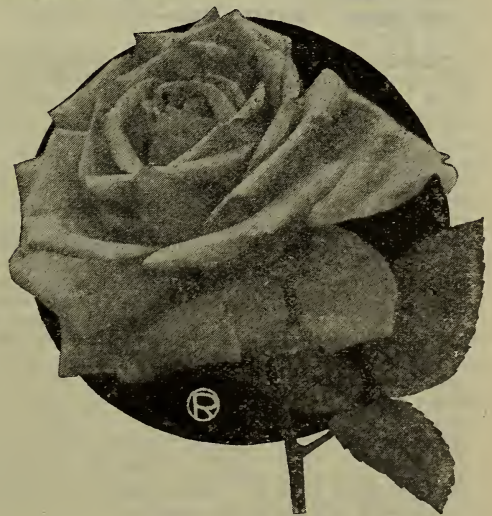
Strong vigorous growers, much admired for moss-covered buds; hardy; most varieties bloom but once in a season, but remain for a long time and very handsome.

Price, 35c each

Blanch Moreau.—Best pure white.

Chapeau de Napoleon.—Beautiful pink.

Eugene Verdier.—Best Red Moss.



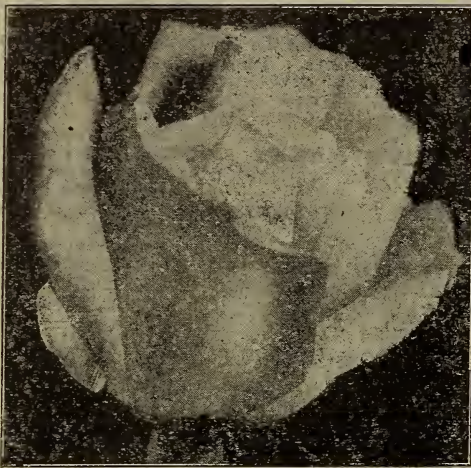
Ophelia.

**SPECIAL**—All rose bushes sent PREPAID this year as we are employing NO AGENTS—see note inside front cover—(Tree roses are not mailable.)



## Climbing Roses. Hardy, Large Flowering

The lavish profusion of bloom on climbing Roses, literally hundreds of flowers on each plant, their beautiful colors and exquisite fragrance render them unequalled for covering houses, arbors, pergolas, fences and boundary walls.



Ophelia.

**CLIMBING CECILE BRUNNER (Poly.).**—A rampant climber. Flowers same as the bush variety. (See page 97.)

Each, 35c and 50c

**CLIMBING MADAME CAROLINE TEST-OUT.**—Without doubt the finest pink climbing rose to date.

Each, 40c and 50c

**CLIMBING KAISERIN.**—Flowers fine ivory white; a grand addition to our list.

Each, 35c and 50c

**CLIMBING METEOR.**—Free flowering. Rich, velvety crimson.

Each, 35c and 50c

## RAMBLER OR PILLAR ROSES

The following climbing Roses all grow vigorously, and are profuse bloomers and very hardy anywhere. The flowers are borne in large clusters. They all belong to the polyanthus class, or more commonly known as the Ramblers.

**AMERICAN PILLAR.**—A single-flowering variety of great beauty. Flowers large and a lovely apple blossom pink, white eye and yellow stamens.

Each, 35c and 50c

**CRIMSON RAMBLER.**—See Flower of Fair Field.

**DOROTHY PERKINS.**—(See illustration). Flowers in immense clusters, beautiful shell-pink, very double with petals artistically crinkled; pretty pointed buds.

Each, 25c, 35c and 50c

**FLOWERS OF FAIRFIELD.**—A perpetual flowering "Crimson Rambler." The flowers are bright scarlet and produced in great profusion.

Each, 25c, 35c and 50c

**RIAWATHA.**—Produced in long, pendulous sprays, with frequently from 40 to 50 flowers on a spray; in color it is a brilliant ruby carmine with a clear white eye; golden stamens—a glowing combination of colors.

Each, 35c and 40c

**TAUSENDSCHON (Thousand Beauties).**—Entirely distinct. The individual flowers are very large, fully 3 inches across, of a most elegant and graceful single. A most delightful shade of soft pink, shaded carmine, and produced in trusses of from 10 to 15 flowers, each truss a veritable bouquet. It is a rampant grower, very healthy with magnificent foliage. Each, 25c, 35c and 50c

**WHITE RAMBLER (Thalia).**—White Dorothy is better.

**CLIMBING PAPA GONTIER.**—Splendid cherry-red flowers; strong climbing habit.

Each, 50c and 60c

**CLIMBING RICHMOND.**—Very free and vigorous; bright crimson.

Each, 50c and 60c

**CLIMBING SAFRANO (Reve d'Or).**—A beautiful saffron yellow, very desirable.

Each, 35c and 50c

**CLIMBING WHITE COCHET.**—Flowers white, edged pink, beautiful form and substance. Strong grower, perpetual bloomer.

Each, 40c and 50c

**CLIMBING WOOTTON.**—Bright red, shaded deep crimson; free flowering, strong grower.

Each, 35c and 50c

**GLOIRE DE DIJON (Cib.).**—Large, fragrant yellow flowers shaded amber and carmine; a magnificent climber.

Each, 40c and 50c

**MADAM ALFRED CARRIERE (Cib.).**—Extra large, very double and sweet, profuse bloomer, white, tinged pale yellow.

Each, 35c and 50c

**MARECHAL NEIL.**—The popular fragrant golden yellow climber, but not as hardy as others.

Each, 35c, 50c and 75c

**PILLAR OF GOLD.**—A vigorous climber. Color, rich apricot, shaded with carmine. A rare colored variety and very desirable.

Each, 40c

**REINE MARIE HENRIETTE.**—Vigorous; flowers large, full; glowing crimson.

Each, 35c and 50c

**SILVER MOON.**—Large, semi-double blooms of good substance with golden stamens. Foliage bronze green and is immune to mildew.

Each, 40c and 50c

**SHOWER OF GOLD.**—A beautiful new semi-double; golden yellow flowers in masses.

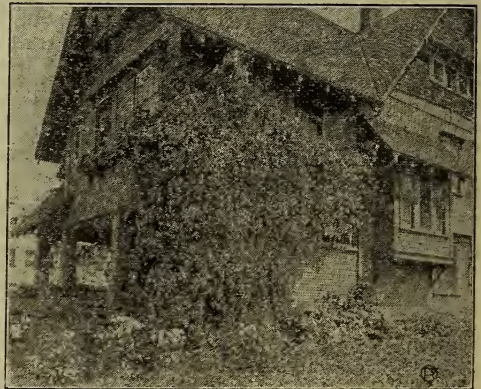
Each, 35c and 50c

**WHITE DOROTHY.**—As its name indicates, it is a sport from Dorothy Perkins, possessing all the fine qualities of that grand variety, but having pure snow-white flowers.

Each, 35c and 50c

**YELLOW RAMBLER (Aglaiia).**—Strong grower, profuse bloomer.

Each, 25c, 35c and 50c



Dorothy Perkins, 30 ft. High, Thousands of Blooms.

**DOZEN PRICES.**—We give you our 35c selected two-year-old Bushes at \$3.00 doz.; our 40c and 50c extra selected at \$4.00 doz. On high priced kinds multiply the single price by 10 to get the dozen price. We can supply the ordinary grade of 25c bushes at \$2.50 doz.



## Hardy Flowering Shrubs and Trees

**NOTE.**—"D" stands for Deciduous plants that drop their leaves in the fall. "E" for Evergreens that are not mailable—see prepay instructions, page 2.

**BERBERIS (D) (Barberry).**—The Barberry is an interesting family of shrubs, varying in size from 3 to 6 feet and having graceful, feathery foliage. Its showy flowers in early summer are succeeded by bright-colored fruit, which is very conspicuous in autumn and early winter.

**Thunbergii.**—A beautiful Japan variety of dwarf habit. Small foliage, changing to beautiful red in autumn. Very desirable for grouping.

Each 35c, 50c and 75c

**Vulgaris (Common European).**—Yellow flowers in drooping racemes in early summer, followed in autumn by orange-scarlet fruit. Each 35c, 50c and 75c

**Vulgaris Purpurea (Purple).**—Violet-colored foliage and fruit; rich-looking and very effective when contrasted with plants of lighter foliage.

Each 35c, 50c and 75c

**CAMELLIA (E).**—Beautiful for the house or garden; evergreen foliage; wax-like flowers which appear about Christmas indoors or early spring outside.

**Japonica, Double White, Pink or Red.**

1½ to 2 feet, each \$1.00 to \$1.50; extra select \$2.00 to \$3.00.

**DEUTZIAS (D).**—Their hardihood, fine habit, luxuriant foliage, and profusion of attractive flowers, render them among the most beautiful and deservedly the most popular of flowering shrubs at the present time. The flowers are produced in May and June.

Your choice—Each 35c, 50c, 75c and up.

**Crenata Fl. Pl.**—Grows 4 to 6 feet tall. Flowers very dainty and pretty; white, tinged rose; very double and full.

**Gracilis.**—Low-growing, compact; covered all over with pure white, bell-shaped flowers.

**Lemoinei.**—Flowers very large and produced in broad-based, cone-shaped heads of from 20 to 30 flowers each, of purest white.

**Pride of Rochester.**—Flowers very double and full; pure white, tinged with blush; great profusion.



Flower Spray, Pride of Rochester Deutzia.

**DAPHNE (E).**—Superb evergreen shrub of compact growth, bearing in early summer many bluish white flowers, highly perfumed, and very lasting. The sweetest-scented shrub in existence. Hardy only west of the Cascades. (Not mailable.)

White or Pink. Each \$1.00 to \$1.50

**HOLLY (E)—Ilex.**—Beautiful small specimen tree for lawn planting. Attractive all the year because of their broad, glossy, prickly leaves, but most beautiful from November to April, when laden with bright scarlet berries.

**English (Aquifolia).**—Budded stock, guaranteed berry-bearing. Well balled and carefully packed.

1½ to 2 ft., \$1.50 to \$2.00; 2½ to 3 ft., \$2.50 to \$3.00; specimen plants, 4 to 5 ft., \$5.00 to \$7.50. Not mailable—by express or freight charges collect.

**HYDRANGEA HORTENSIA (D).**—A handsome half-hardy Japanese shrub; most frequently seen in tubs and pots, and does well in somewhat sheltered place. Ornamental foliage and beautiful flowers in large trusses. (See cut.)

**Hortensia Blue.**—Large flowers; clear blue. Very popular.

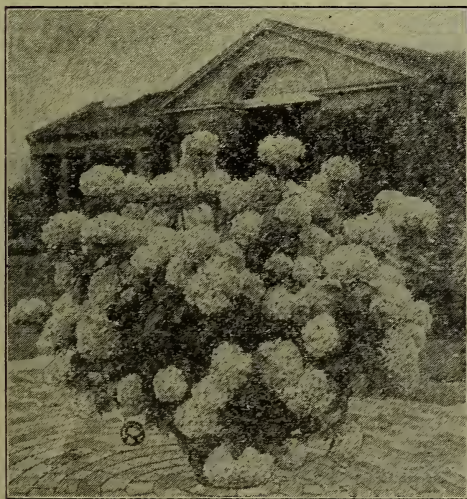
60c to \$1.00. Specimens, \$1.50 to \$2.00

**Hortensia White.**—Pure white; large flower.

60c to \$1.00. Specimen, \$1.50 to \$2.00

**Hortensia Pink.**—A beautiful new pink from Japan. Large, free flowering. Each 50c, 75c and \$1.00; extra large \$1.50 to \$2.00

**Schizophragma (Climbing Hydrangea).**—(See Climbers), page 106.



Hydrangea Hortensia

OUR COMPLETE 64 PAGE NURSERY CATALOG, FULLY ILLUSTRATED, FREE ON REQUEST.

**ABOUT PRICES.**—The higher prices are for specimen plants, for a large display and immediate effect.



## Hardy Flowering Shrubs—Continued



*Hydrangea paniculata grandiflora.*

**Paniculata Grandiflora.**—The grandest as well as the most popular of all shrubs, and hundreds of thousands of them are sold every year; excellent for hedges or massing; unsurpassed for the lawn; blooms in July and August, and continues in bloom for two or three months. The flowers are massive, cone-shaped, sometimes 10 inches in length, and changing from the original pure white to pink, and finally to a beautiful rich coppery red.  
Each 25c, 35c, 50c; Tree Shaped \$1.00 to \$1.25.

**LILACS (D)**—*Syringa*.—Everyone loves the lilac and no garden is complete without one or more. The new imported grafted varieties are very beautiful and produce magnificent large flowers.

**Common White or Purple.**

Each 50c to 75c; large specimens, \$1.00 to \$2.00.

**Imported Budded Varieties.**—Your selection following named varieties, 3 to 4-year-old select plants, 3 to 4 feet and up, 75c to \$1.25; specimens, 4 to 6 feet, well branched, \$1.50 to \$2.00.

**Charles X (Single).**—A strong, rapid grower; leaves dark and shining; trusses large and rather loose; color rosy purple.

**Marie LeGraye (Single).**—Beautiful creamy white flowers of immense size.

**Souvenir de Louis Spaeth (Single).**—Immense trusses of a deep dark red.

**Belle de Nancy. (Double).**—Brilliant rose, white center, very fine.

**Mme. Lemoine (Double).**—Fine double white variety; very fragrant.

**Michael Buchner (Double).**—The best pale lilac or lavender.

**President Grevy (Double).**—Long trusses; double; beautiful blue rosy lilac panicles.

**MAHONIA AQUILIFOLIA (E)**—*Oregon Grape*.—Native of Oregon, and our state flower. Very valuable and desirable on account of its beautiful foliage and clusters of yellow flowers in spring, followed by blue-black berries. Choice plants, nursery grown, each 40c to 75c; large \$1.00 to \$1.50

**MAPLE (D)**—*Acer Japonica*—**Japanese**.—A beautiful class of low-growing, shrub-like trees, having brilliant colored leaves, which retain their brightness from spring until fall. Nothing finer than these can be had for planting, either in groups or singly on the lawn.

**Price:** Any of the following varieties of Japanese Maples, choice plants, \$1.00 to \$1.50; specimen plants, \$2.00 to \$3.00:

**Atropurpureum.**—Deep maroon, palmate leaf.

**A. Atropurpureum Variegatum.**—Bright crimson, with deep maroon variegation

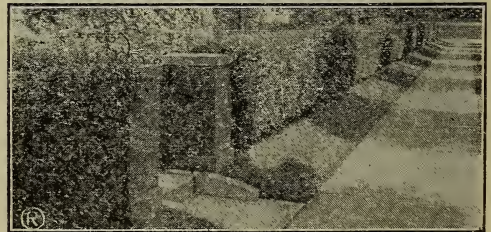
**A. Atropurpureum, Dissectum.**—Deep maroon, richly fringed, thread-like leaflets.

**A. Osaka-Zuki.**—Light maroon, changing to blood red in fall; palmate leaf.

**A. Scolopendrifolium Rubrum.**—Dark red fine, ribbon-like leaflets.

**PRIVET**—(Evergreen).—One of the best hedge plants; has small, pointed, evergreen leaves; grows rapidly and compactly; stands severe pruning, and can be kept in fine shape with little care. (See cut.)

1-year-old plants, 12 inches up, per 50, \$1.75; per 100, \$3.00; 2-year-old plants, 24 inches up, per 50, \$3.50; per 100, \$6.00



Privet Hedge.

**QUINCE (D)**—*Cydonia*.

**Japonica (Japan Quince).**—Popular shrub, which blooms profusely in early spring; flowers dazzling scarlet; makes an excellent hedge. Each 35c, 50c and 75c

**SHADE TREES.**—We have thousands of all kinds of shade trees for street and park planting. Nursery Catalog tells all.



**RHODODENDRONS (E).**—This, wherever known, is universally acknowledged to be the most showy, magnificent, hardy evergreen shrub that grows.

The broad, thick, evergreen foliage with its glossy richness, would alone entitle it to a place foremost in the rank of evergreen shrubs, but when, in May and June, this mass of luxuriant foliage is almost hidden by the magnificent array of beautiful flowers in all colors from white to purple, the effect is simply grand. We import from Holland the choicest and best-named varieties.

**Choice Named Varieties.**—Strong and bushy, well set with flower buds that will flower nicely the first year; your selection of colors in **White, Pink, Rose, bright or dark Red, Lavender, Rosy, Lilac or Purple.**

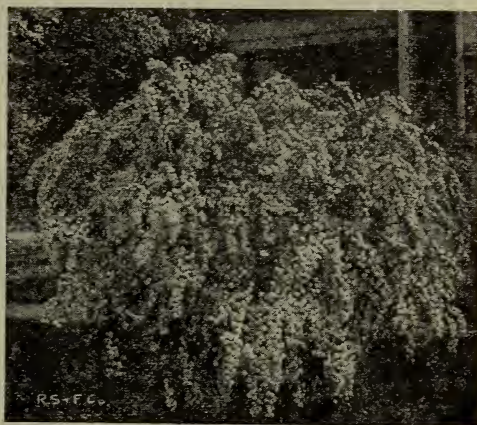
**PRICES:**—Freight or express only charges collect (not mailable). Two foot plants \$1.50 each; select, \$2.00 each; extra select, \$2.50 each; extra large specimens, \$3.00 to \$5.00 each.

**SPIREAS (D).**—Graceful shrubs, everyone should plant. They are of the easiest culture, and very desirable in collections. All the Spireas bloom with a riotous extravagance which makes them quite striking. Their individual style, color and habits of growth differ so markedly, that a collection of varieties will ensure bloom the entire season.

**Anthony Waterer (Bumalda).**—Covered nearly the whole growing season with large umbels of deep crimson flowers.  
Each 60c and 75c

**Frunifolia (Bridal Wreath).**—Slender, erect ingrowing variety, bearing very early in the spring, small double white flowers the entire length of its branches; very graceful habit. Each 35c, 50c and 60c

**Van Houttei.**—The grandest of all the Spireas. It is a beautiful ornament for the lawn at any season, but when in flower it is a complete fountain of white bloom, the foliage hardly showing; perfectly hardy and an early bloomer. (See cut.)  
Each 35c, 50c and 60c



Spirea Van Houtte.

**Thunbergii.**—Of graceful habit; the branches are slender and somewhat drooping; foliage in autumn changes to bright red and orange; flowers in feathery masses, white, appearing early.

Each 35c, 50c and 60c

**Billardi.**—Produces fine, deep pink flowers and blooms nearly all summer.

Each 35c, 50c and 60c

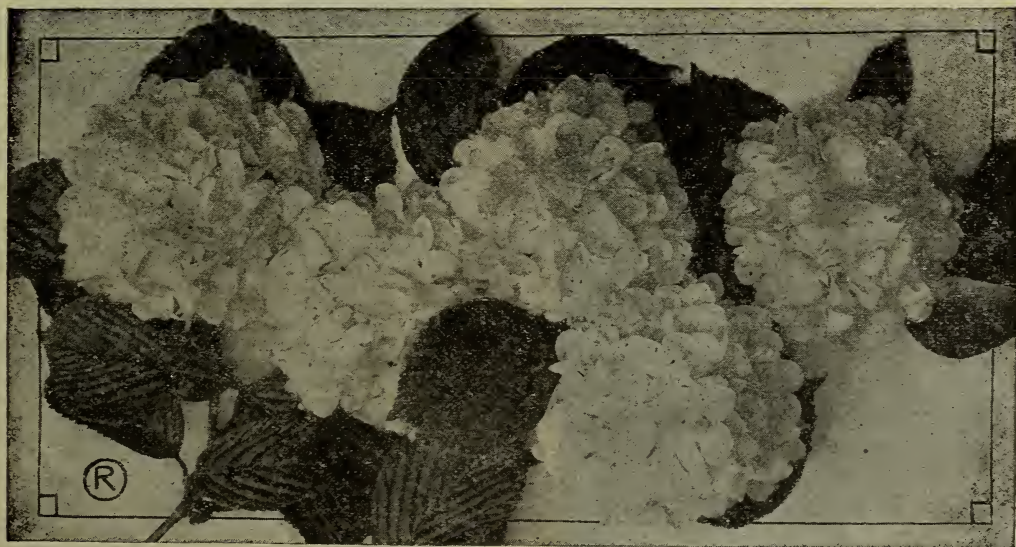
**SNOWBALL (D)—Virburnum.**

**Sterilis (Common Snowball).**—Blooms in latter part of May. Flowers pure white, large balls. Every one should plant a Snowball.

3 to 4 ft. each 50c to 60c; 5 to 6 ft. 75c to \$1.00; extra choice plants \$1.50.

**Plicatum (Japanese Snowball).**—One of the most charming hardy flowering shrubs in existence; bears great wreaths and clusters of pure white globular masses of flowers; covered with bloom for weeks in the spring; grows 4 to 6 feet high; entirely hardy.

1½ to 2 ft. 50c to 60c; 2 to 3 ft. 75c to \$1.00.



Viburnum Plicatum—Japanese Snowball.

**DON'T**

Be misled by the fine catalogs with little prices sent out from the East. Buy our field grown plant, much larger and better than the weakly Eastern stock.



**WEIGELA (D) — (Diervilla).**— Beautiful shrubs that bloom in May, June and July. The beautiful trumpet-shaped flowers are produced in so great profusion as to almost entirely hide the foliage. They are very desirable for the border or grouping, and as specimen plants for the lawn. (See illustration).

Prices: Following kinds, each 35c to 50c; extra large plants, 60c to 75c.

**Candida.**—Beautiful white flowers; a continuous and profuse bloomer; very hardy.

**Rosea.**—Lovely large, rose-colored flowers, borne in such profusion that the whole bush appears a mass of rosy bloom.

#### **WALNUTS (D).**

**English.**—Nut-bearing, second-generation stock, not grafted.

Prices: Each, 3 to 4 ft., 30c to 40c; 5 ft., each 60c; 6 to 8 ft., 75c to \$1.00 each; 8 to 9 ft., \$1.25.

**Grafted Stock.**—This year we are prepared to supply you with **Oregon grown** trees that are extra select and **ESPECIALLY FINE ROOTED**, much superior to the California trees on account of the fine growth of strong fibrous roots. The stock we offer is **Voorman's famous Franquette** grafted on California black walnut roots.

Prices—4 ft., 85c; 5 to 6 ft., \$1.00; 6 to 7 ft., \$1.25; 7 to 9 ft., \$1.50 to \$1.75.

#### **YUCCA (E).—Adam's Needle.**

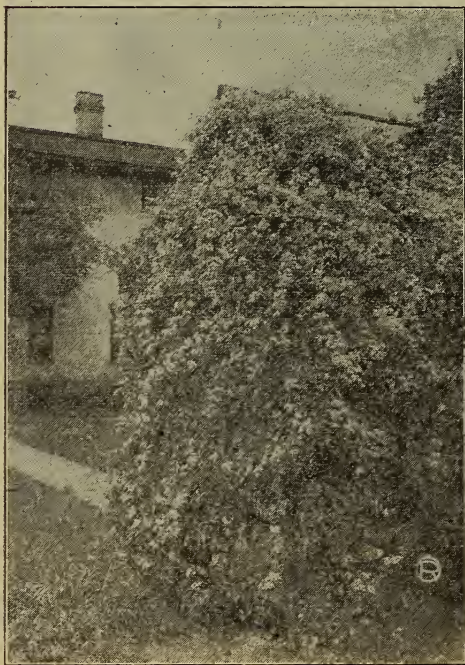
A stately foliage and flowering plant equally imposing in solitary or group plantings, always conspicuous. The broad sword-like foliage is evergreen; while midsummer shows great erect branching stems bearing a showy display of pendant, creamy-white bells.

1-year plants, 8- to 10-inch, 20c each, \$2.00 dozen; 2-year and up, 35c to 50c; 15- to 24-inch, 75c to \$1.50; specimen plants, \$1.50 to \$3.00.



Yucca Plant, in Bloom.

### Beautiful Hardy Climbing Vines.



Clematis Paniculata.

**CLEMATIS (Virgin's Bower).**—No hardy flowering climbing vine excels in beauty and effectiveness the finer sorts of Clematis. As a climber for the veranda, a screen for fences, for pillars along the garden walks, for training on walls or arbors, or in masses on rockwork, it has no rival among strong growing blossoming plants. The Clematis should be grown in rich, deep, sandy loam, and be well mulched with rotten manure in winter. The richest sheets of bloom and largest flowers are obtained where it has partial shade and a liberal supply of water at the roots.

**Paniculata (New Sweet-Scented Japan Clematis).**—Of very rapid growth, quickly covering trellises and arbors with handsome, clean, glossy, green foliage. The flowers are of small size, pure white, borne in profusion in September and October, and of a most delicious and penetrating fragrance. Small plants, 25c; strong 2 to 3-year-old plants, 35c to 75c each.

**C. Montana.**—A hardy rapid grower, flowers snow white, fragrant and freely produced in May and June.

Strong plants, 50c to 75c

**Montana Rubens.**—New, same as above, except in color, which is of a pleasing shade of soft rosy red.

Each, 60c to 75c





## Clematis.

### LARGE FLOWERED

These bear large and beautiful flowers of various shades of color through the latter part of the summer and early fall. The following varieties are the very best and our plants are all two years old.

### PRICES

Your choice of the following strong roots, 75c each; 3 for \$2.00; 5 kinds, \$2.75 postpaid.

**Lawsoniana** (No. 1)—The best light blue or lavender.

**Ville de Lyon** (No. 2)—The best bright red; equal to Jackmanii in size.

**Henryi** (No. 3)—Fine, large, creamy white flowers. A fine strong grower.

**Jackmanii** (No. 4)—Intense violet purple; most popular variety.

**Duchess of Edinburgh**.—A free-flowering double white variety; very fragrant.

**CAUTION**.—IN PLANTING CLEMATIS DIG A LARGE HOLE AND SPREAD THE ROOTS OUT VERY CAREFULLY. AND COVER CROWN OF PLANT ABOUT FOUR INCHES. KEEP WATERED IF SET CLOSE TO A DRY WALL.

## AMPELOPSIS

**Veitchi** (Boston Ivy, or Japan Ivy).—The most popular and desirable climbing plant for covering brick, stone or cement walls, etc.; when it becomes established at the root it is of very rapid growth, and clings to the smoothest surface. The foliage is of a rich olive green during the summer, changing to various shades of bright crimson and scarlet in the fall. In planting cut back to within 6 inches of the ground, so that the new growth may cling to the wall from the bottom up.

Strong plants 25c to 35c; extra strong 50c

**Quinquifolia** (Virginia Creeper, or American Ivy).—This well-known climber is one of the best and quickest growing varieties for covering trees, trellises, arbors, etc.; its large, deep green foliage assumes brilliant shades of yellow, crimson and scarlet in the fall.

Strong plants 25c to 35c; extra strong 50c

**Engelmanni**.—Very much like the above, but on a rough surface it will cling without support in the same way as the Veitchi.

Strong plants 25c to 35c; extra strong 50c

## IVY

**Common English**.—Thick, leathery, ever-green leaves; strong grower.

Good roots each 15c to 25c



## Hardy Climbing Vines—Continued



Trumpet Vine (Bignonia).

### CLIMBING HYDRANGEA

**Schizophragma.**—This bears large panicles or trusses of flowers, which resemble a white Hydrangea. It clings readily to any rough surface or wall, flowering freely during July and August. Large imported plants \$1.00 each; pre-paid \$1.35.

### DUTCHMAN'S PIPE (*Aristolochia Sepho*)

A strong, rapid growing vine with handsome light green leaves. It will give a quick, dense shade and is much used on arbors and trellises. The brown flowers are shaped like the bowl of a pipe. Large plants. Each 75c to \$1.00

### HONEYSUCKLE

A beautiful climber, rapid grower and very desirable; flowers very fragrant, and produced in great profusion. Your choice of the following 35c to 50c each; extra strong 50c to 75c.

**Halleana.**—Very popular; almost evergreen; profuse bloomer; flowers white, passing to yellow.

**Belgica (Monthly Fragrant).**—Flowers are large and very fragrant; color red and yellow.

**Sempervirens (Scarlet Trumpet Honeysuckle).**—Trumpet-shaped flowers of a bright scarlet.

**Flava (Yellow Trumpet).**—A choice but scarce species, with bright yellow flowers.

### JASMINE

Graceful, pretty flowers with fine foliage, clean, neat, attractive and hardy.

Each 50c to 60c

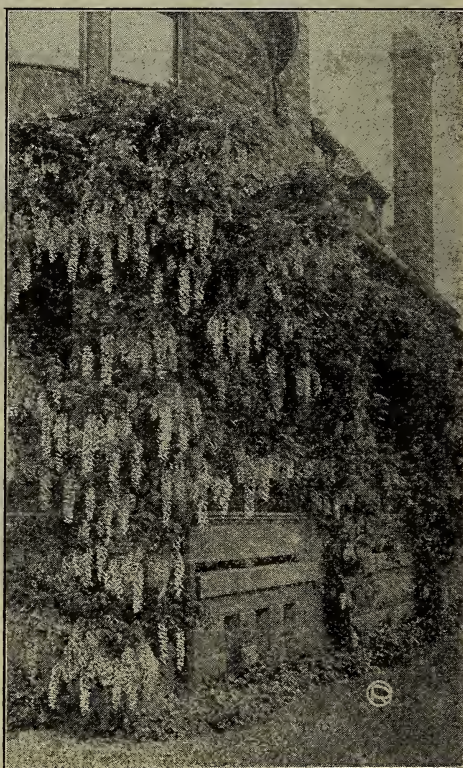
### TRUMPET VINE—Bignonia

For covering unsightly places, trellises, rockwork, or wherever a showy-flowering vine is desired, the Bignonias will be found very useful. The flowers are large, attractive and borne profusely when the plants attain a fair size.

Strong plants each 50c to 75c

### WISTARIA

A rapid, hardy climber that will grow to a height of 50 feet or more. The fine foliage and flowers are produced early in the season, and come in magnificent clusters. One of the most desirable and showy climbers we know of.



Wistaria Vine and Flowers.

**Multijuga.**—This valuable new Wistaria was introduced from Japan, and produces magnificent racemes of lovely flowers, often measuring 18 to 24 inches in length. **WHITE OR PURPLE**—budded stock from Japan \$1.00 to \$1.50; extra old and strong, \$2.00 to \$2.50.

**Sinensis.**—Lovely panicles of flowers, produced in the most wonderful profusion. **WHITE OR PURPLE**, strong, 2-year vines, 60c to 75c; extra heavy, \$1.00 to \$1.50 each.

**Important**—When planting clematis and other vines be sure you spread out the mat of fine roots so that the soil comes in contact with all of them, otherwise they will dry out and die. Be very careful with Clematis especially.



## Why Not Raise Some Asparagus and Rhubarb

Every garden large or small should have at least a small supply. If you want special information on culture of these roots, we have **ASPARAGUS CULTURE**, by Hexamer, 174 pages, 60c, and **NEW RHUBARB CULTURE**, by Morse and Fiske, 130 pages, 60c.

### ASPARAGUS ROOTS

One of the earliest and finest of spring vegetables; very easily grown. A bed once planted is good for years if properly attended to and well manured. Set plants 18 inches apart, in rows 3 feet apart.

**ONE YEAR OLD.**—Prepaid, dozen 25c; 50, 75c; 100, \$1.00. By express or freight, 1000, \$6.00.

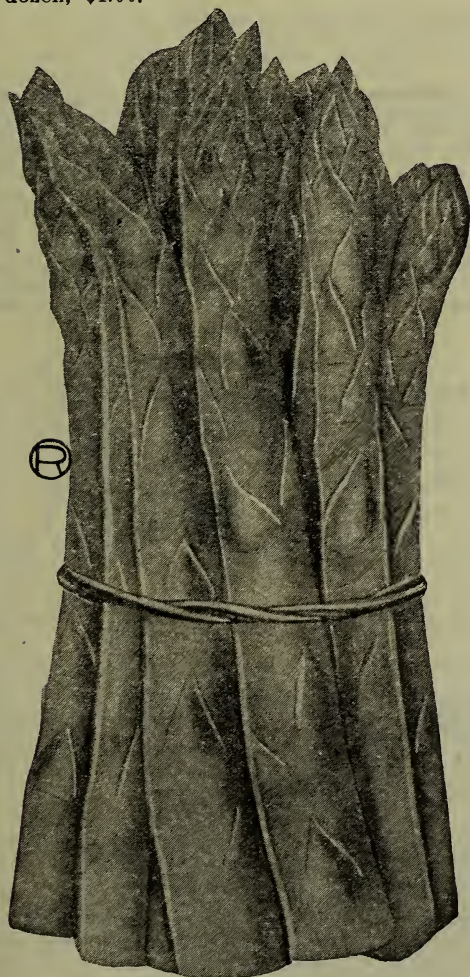
**TWO YEAR OLD.**—Prepaid, dozen, 40c; 50, \$1.00; 100, \$1.25. By express or freight, 1000, \$8.00.

Buy Roots and Save 2 to 3 Years.

### HOP ROOTS

**Regular Root Cuttings**, price, 5c each; 40c per dozen; \$1.20 per 100. Low prices by the thousand.

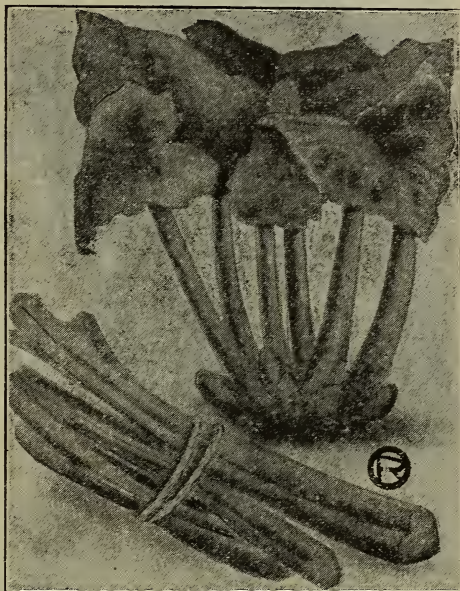
**Crown Roots** give quicker results; each, 10c; dozen, \$1.00.



Asparagus.

### HORSE-RADISH ROOTS

Prices, 5c each; 40c per dozen; \$1.50 per 100. Low prices by the 1000.



Rhubarb.

### RHUBARB

#### PIE PLANT—WINE PLANT

Plant in the fall or early spring from 3 to 4 feet apart, in the richest soil you have, or can prepare. New book: "Rhubarb Culture," a complete guide to dark forcing and field culture (well illustrated), 130 pages, 60c.

#### BANWINE RHUBARB—A Moneymaker

This comparatively new and very profitable rhubarb is claimed by our grower to be superior to all ordinary varieties and unequalled by any known marketable sort. The trueness of the strain is unquestionable, as it is only propagated from root divisions or growing buds from stock, that shows the superior merits of the parent stock.

**Banwine** is a quick, very early grower, producing very freely giant heavy stalks, that are exceedingly tender, brittle and of the finest flavor and color. A "peerless" rhubarb for home gardens or commercial plantings. Send for pamphlet giving testimonial and cultural directions.

**PRICES:** Divided Roots (Buds or Eyes, as they are often called), 15c each, 2 for 25c, 6 for 60c, 12 for \$1.00, postpaid; per 100, \$7.50 prepaid. Large divisions 25c each. Quantity price on request.

#### BURBANK'S CRIMSON WINTER

Very early medium size, brilliant crimson and of fine quality. Highly esteemed in California. Prices: Small roots, each 15c, doz., \$1.50; large, 25c, \$2.50 doz., postpaid.

#### VICTORIA MAMMOTH

A popular variety that has been grown for years.

**One Year.**—Each 10c; doz., 75c postpaid. Not prepaid, doz., 50c; 100, \$3.00. **Two Year.**—Each, 15c; doz., \$1.25 postpaid. Not prepaid, doz., 85c; 100, \$6.00. If wanted in larger quantities, write for special price.



## FRUIT TREES, BUSHES, VINES AND PLANTS



### Currants

**PERFECTION.**—New; a late introduction of great merit. Perfection is the largest, most productive, finest-flavored, rich, mild, sub-acid; plenty of pulp; few seeds; healthy, bright red currant to date.

1-year, 15c; 2-year, 20c each

**Cherry, Fays, White Grape or Black Naples.**  
—All well known kinds.

1-year, 10c each; 2-year, 15c

### Gooseberries

**OREGON CHAMPION.**—Berries large, round and pale green; fine for table use and pies; hardy, strong, and a very prolific bearer; most popular and best commercial variety.

1-year, 8c each; 2-year, 10c

**INDUSTRY.**—English variety; large oval; dark, red, hairy, rich and agreeable; vigorous and productive.

1-year, 25c each; 2-year, 25c



Black Cap Raspberries.

### Free on Request

#### OUR DESCRIPTIVE FALL CATALOG

Limited space in this catalog will not permit us to give full descriptions of all our Fruit, Shade and Ornamental Trees and Shrubs and Vines, but we will gladly mail you a copy of our **DESCRIPTIVE FALL CATALOG OF NURSERY STOCK.**

### Have a Small Fruit Garden

What's nicer than fresh fruit from your own garden? We will describe a few of our best small fruits.

### Grapes

**CAMPBELL'S EARLY.**—Clusters large and handsome; berries large, round, black, with purplish bloom; flesh firm but tender; seeds few; flavor rich, sweet and slightly vinous. A strong and vigorous grower and ripens its fruit early. A fine home variety for all purposes. Fruit keeps a long time in perfection.

1-year, 20c each; 2-year 35c

**Concord,** well known **Delaware,** the best red variety. **Niagara,** best white; your selection.

1-year, 15c each; 2-year, 20c

### Raspberries

**ST. REGIS (New).**—The St. Regis ever-bearing red raspberry is the sensation of the day. It is being talked about from the Atlantic to the Pacific. The demand is enormous. It is a very valuable variety. It originated in New Jersey among a colony of Italians who made money by selling the fruit to hotels and restaurants late in the fall after all other kinds of berries were gone. It is a fine berry in every respect, being hardy, very productive, of good color and fine flavor. It does finely in the regular season and you get the fall crop extra. We unhesitatingly recommend this variety.

Price, each, 10c; doz. \$1.00; 100, \$7.50 prepaid

**Cuthbert and Marlboro,** well known red varieties, or **Gregg and Cumberland,** popular black caps.

1-year, each, 6c; doz., 60c; 100, \$4.00

### Blackberries

**ELDORADO.**—New bush variety. Very vigorous and hardy; yield is enormous; berries large, jet black, borne in large clusters, and ripen well together; sweet, melting and pleasing to the taste; no core, and keep well.

Price 1-year, 12c each; extra strong, 15c

**Lawton or Blowers,** well known popular sorts.

1-year, 8c each; extra strong, 10c

**Evergreen or Himalaya Giant,** trailing sorts, strong plants. 15c each; \$6.00 per 100



## Plant a Few of These Delicious Berries

Trail Them On the Garden Fence or Over a Trellis.

**PRICES**—Your Choice of the following, strong, transplanted 2 year plants 15c each, \$1.50 doz., \$7.50 per 100. Write for special quantity prices. Tips or 1 year roots give poor results—we do not offer them.

### Loganberry

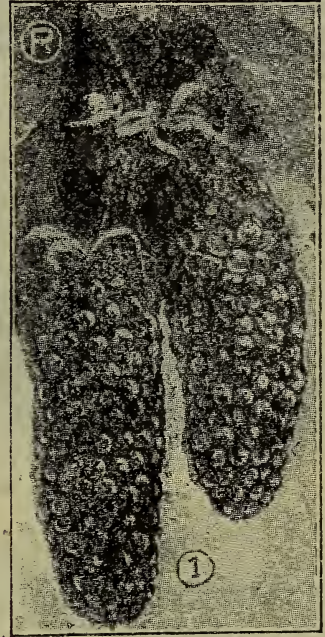
In great demand again for canning and drying. An exceedingly strong grower and an enormous bearer. The fruit is larger and longer than the blackberry and produced in immense clusters; color, dark red. Has a pleasant, vinous flavor, delicious and peculiar to this berry alone; fruit ripens early. It is excellent for the table, eaten raw or stewed, and for jelly or jam is without an equal.

### Burbank's Phenomenal

A most desirable, refreshing berry for the home garden. Of a bright crimson raspberry color; very productive, and most delicious of all berries for pies, canning, jellies or jams. Sweeter than the Loganberry and fine as a fresh table fruit.

### New Mammoth Blackberry

A grand addition to the list of Blackberries. The handsome, large juicy berries are delicious. It is a rampant grower, of trailing habit; enormously productive and early. Fruit is enormous, specimens measuring two and one-half inches long; seeds small, soft and abundant; cores small and soft. In size and flavor it surpasses all other varieties of blackberries. Excellent for home use.



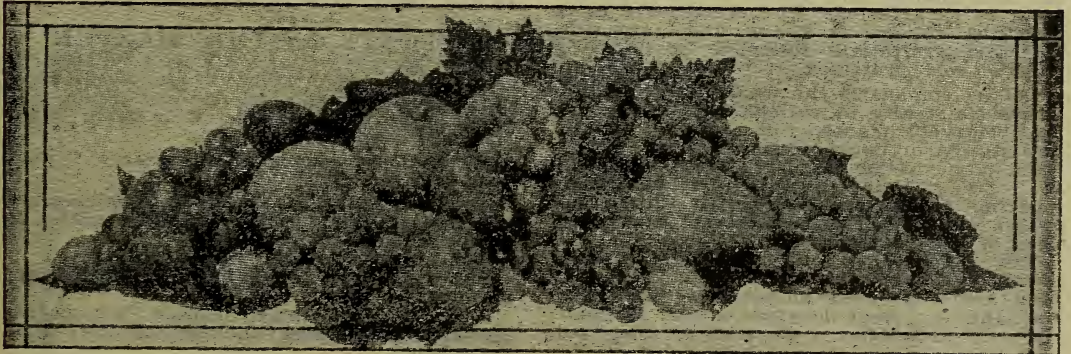
New Mammoth.

## General Price List Fruit and Nut Trees

If you have not time to send for our descriptive catalog of Nursery Stock you can order any standard varieties of the following and we can no doubt supply them. In case they can not be had locally tell us if we can substitute some good variety of equal merit.

| KIND             | 1 Year                  |              | 2 Year                  |                       | Selected |
|------------------|-------------------------|--------------|-------------------------|-----------------------|----------|
|                  | 3-4 Feet                | 4-6 Feet     | Branched                | 2 to 3 Year           |          |
| Apples           | 18c                     | 20c          | 25c                     | 30c to 40c            |          |
| Apricots         | 25c                     | 30c          | 35c                     | 40c to 50c            |          |
| Cherries         | 25c                     | 35c          | 50c                     | 75c to 1.00           |          |
| Pears            | 25c                     | 30c          | 40c                     | 50c to 75c            |          |
| Prunes           | 15c                     | 20c          | 25c                     | 35c to 50c            |          |
| Peaches          | 18c                     | 20c          | 25c                     | 35c to 50c            |          |
| Plums            | 20c                     | 25c          | 30c                     | 35c to 50c            |          |
| Quince           | 40c                     |              | 50c                     | 60c to 75c            |          |
| English Walnuts  |                         |              |                         |                       |          |
| Select Seedlings | 40c                     | 60c          | 6-8 ft. .75;            | 8-10 ft. 1.00 to 1.50 |          |
| French Grafted   |                         | 1.00         | 6-7 ft. 1.25;           | 7-9 ft. 1.50 to 1.75  |          |
| Dwarf Apples.    | Each, 35c, doz., \$3.50 | Dwarf Pears. | Each, 35c; doz., \$3.50 |                       |          |
| Almonds          | 1 yr., 50c; 2 yr. 60c   | Persimmons.  | 1 yr., 50c; 2 yr., 60c  |                       |          |

**DOZEN PRICES**—To get the dozen prices on above multiply the single price by 10. Very low prices by the 100 or 1000. Write, stating quantity and kind wanted.

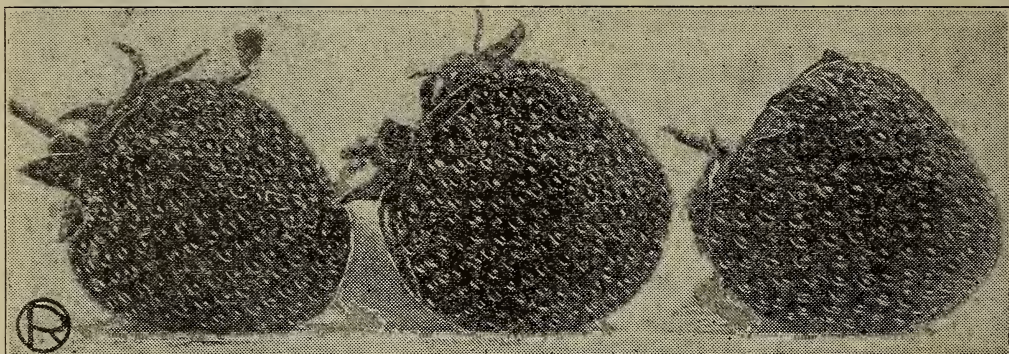


**QUALITY**—We call your attention to the fact that we are catering to the "Particular Planter," who wants "High Quality," and is willing to pay a price necessary to secure it. Any sensible person knows that "Highest Quality" in stock of any kind is more expensive to produce than common, and therefore is worth more. Our prices are low, quality considered.



**SELECTED  
STRAINS****STRAWBERRY PLANTS****NONE  
BETTER**

Our strawberries are carefully grown, trimmed and packed in the best manner to insure their arrival in good, fresh condition. If you want good, strong, healthy, vigorous plants and true to name, send to us. Our prices are right; our plants are O. K.



"Wellington Marvel," the Latest Strawberry With a Future.

### "Marvel"—A New Strawberry of Great Merit

We made strong claims for the new strawberry, "Wellington Marvel," when we first offered it to our customers last year; but after another season, we are more enthusiastic than ever about it. We could write pages about this wonderful variety, but as our supply of plants will probably not be great enough to fill all orders this year, we will not use our valuable catalog space at this time.

The writer made a visit last spring to Mr. Butler's farm to examine his method of growing plants and to test the qualities of the "Marvel" with other varieties, that are extensively grown today. If we were to tell you how far ahead, how superior, the "Marvel" is over Clarks, Magoons, Oregon, Gold Dollar and such varieties, you would scarcely believe it. We claim there is no comparison at all. The "Marvel" is in a class by itself, and head and shoulders above all in Beauty, Flavor, and Production.

Wellington Marvel is almost frost-proof. Last spring, as many Oregon growers know to their sorrow, the late frosts destroyed the greater part of the Strawberry crop, but a severe frost, in fact a real freeze that froze water one-fourth of an inch thick at the Butler farm, did not to any great extent harm the "Marvel." Some of the large half-ripe berries were frosted and turned black, but the blooms and young berries did not seem to be affected. The secret of this is, that the foliage is heavy and spreading, and each fruit-stalk seems to be perfectly covered and protected.

Let us emphasize the word, "fruit-stalks." These can really be called "fruit-stalks" on the "Marvel" plants, for they are strong and sturdy, producing from 12 to 18 berries. Each plant in Mr. Butler's patch had from 15 to 20 of these fruit-stalks. It was really amazing to gather the center foliage together and behold the enormous productiveness of the "Marvel."

The ruddy glow of the Marvel spreads evenly and leaves no white tips. It is very firm and a peerless shipper; is first class for canning. Heat does not impair its quality, but intensifies the color to deep red. The flavor of the Marvel is delightful.

**A Two-Crop Variety**—We believe the "Marvel" will prove to be one of the best of the ever-bearing varieties. It ripens a



Wellington "Marvel" plant with some leaves removed to show mass of young fruit.

monster crop of early berries, after which, if the tops are cut off, plants cultivated and, if possible, irrigated a few times, they will bloom again in July and produce a second crop, lasting until winter.

### REPORTS ON THE "MARVEL"

Last spring we had Mr. Butler send us a few crates of "Marvels" so as to show our customers and friends the fruit, and allow them the pleasure of tasteing same. Here is what they said:

"The most wonderful strawberry I have ever seen."

"I claim to be an expert on strawberries, but the 'Marvel' has never been equalled in perfection, color and quality."

"This certainly is a luscious berry."

"Put me down for 100 plants. The flavor is delicious."

One of Portland's leading strawberry buyers, after seeing and tasting the "Marvel," said:

"I will pay Mr. Butler a premium above market price for all the 'Marvel' berries he is growing." And he did.

**Don't use plants from old berry fields. Buy our healthy, vigorous, properly grown plants. The most profitable kind.**



## WELLINGTON MARVEL STRAWBERRY—Continued

**WELLINGTON'S MARVEL** was originated by Wellington S. Butler, of Merlin, Ore., a strawberry specialist. We have obtained the exclusive sale of all his plants, and take great pleasure in offering to our customers and all lovers of strawberries this really **superb and meritorious new variety**. In all our experience and observation, we have never seen the equal of the "Marvel" in color, shape, size and quality. The ripe berries command instant attention on account of the bright, fresh, delightful appearance. We predict a bright future for the "Marvel," and the commercial grower, who gets a start of this variety and markets the fruit, will reap a rich harvest.

Prices for 1917.

Each 15c, 3 for 40c, 12 for \$1.50, 100 for \$10.00, prepaid. Advance orders lead us to believe our supply of plants will not be great enough to satisfy the demand—Order early.

**BEWARE!** To protect our customers, all Wellington Marvel strawberry plants will be marked with a printed wooden label, as follows: **Originators Stock Wellington Marvel on one side and our name, Routledge Seed & Floral Co., on the other. Plants not marked thus ARE NOT TRUE STOCK.**

Route No. 1, Post Falls, Idaho,  
March 28, 1916.

Routledge Seed & Floral Co.

Dear Sirs: Enclosed find Express Money Order for 1000 Strawberry Plants, which I wish you to send to me at once. I received the other order of Plants O. K. Was well pleased with them, so I want more Plants.

Yours truly,

C. J. FRITZ.

## POPULAR, WELL-KNOWN, OREGON-GROWN STRAWBERRIES

**GLEN MARY (Early).** Has proved profitable and successful wherever planted. A heavy producer of big, dark red beauties. The berries are inset with bright-yellow and very prominent seeds which give them a beautiful appearance in the box. As a shipper it has no superior.

**CHESAPEAKE.**—Admired for its beautiful, large sized fruit, great productiveness, extreme hardiness and ability to withstand frost, and to produce good crops in high, dry locations. Late and fine flavor.

**GOLD DOLLAR.** One of the earliest berries on the market. Fruit good, medium size, and attractive; rather tart; fine flavor; foliage, heavy, large and spreading, which protects the blooms from early frosts.

| Variety.             | Charges Prepaid. |       |       |        |
|----------------------|------------------|-------|-------|--------|
|                      | Per doz.         | 25    | 100   | 1000   |
| Clark's Seedling ... | \$.25            | \$.40 | \$.85 | \$5.00 |
| Chesapeake .....     | .30              | .50   | 1.00  | 6.00   |
| Glen Mary .....      | .30              | .50   | 1.00  | 6.00   |
| Gold Dollars .....   | .25              | .40   | .85   | 5.00   |
| Magoon .....         | .25              | .40   | .85   | 5.00   |
| Marshall .....       | .25              | .40   | .85   | 5.00   |
| New Oregon .....     | .25              | .40   | .85   | 5.50   |
| Wm. Belt .....       | .30              | .50   | 1.00  | 6.00   |

**NOTE.**—Prices Not prepaid, 15c per 100; 50c per 1000 less. Special price on 3000 or more.

500 plants, all one kind, 10c more per 100 than 1000 rate.

OUR FALL CATALOG of Nursery Stock gives full description of the above varieties—free.



From photo taken May 1st, 1916. Mr. Butler in his field of young stock, plants from which our supply will come this spring.

## Superb-Everbearing

This we believe is the best of the ever-bearing kinds. **Superb** is a truly wonderful fall bearing variety. It is doubly valuable as it yields heavily, early as well as late. This new **Superb** is really a true everbearer and gives a good supply of **choice, rich, red berries**, until stopped by heavy frosts in the fall. This is the first everbearing strawberry that we have found of real merit and of a good flavor and color. Growers who have tested it on this coast are **enthusiastic over it**. Supply of plants limited this season. Prices, postpaid, doz., 50c; 25, 75c; 50, \$1.25; 100, \$1.75; 1000, write.

**WM. BELT (Early).** This variety grows big crops of large, red, attractive berries that hang in clusters from powerful stems. The flesh is very rich and meaty and of deep red, which extends to the center. The berries are in every respect "extra fancy," and the fact that it grows, like its famous mate Glen Mary, under practically all conditions, makes it one of the most valuable varieties ever originated.

**MARSHALL.** One of our best Western varieties and very popular wherever known. Marshall is one of the blood-red varieties that never fails to attract the eye and to satisfy the taste. It is deliciously sweet, generously prolific, and is in every way an ideal variety for extensive planting or home garden. Excellent for canning, as it holds its color, shape and flavor.

**MAGOON.** Berry large, fine and excellent; sub-acid flavor; bears heavily and throughout the season.

**CLARK'S SEEDLING.** The berry that has made Hood River famous; excellent shipper; berries large, firm and of delicious flavor; vines bear large crops; is especially adapted to the Pacific Coast.

**OREGON IMPROVED.** One of the finest and most satisfactory strawberries ever introduced. It always looks bright, fresh and attractive. The berry is very large, firm and handsome; rich, dark red, extending to the center. The flavor is rich, sweet and delicious. For table use and canning, it cannot be surpassed. The "Oregon" ripens early and continues in bearing until late in the season.

**DON'T** be misled by the fine catalogs sent out from the East. Buy Western grown plants and Western varieties, better berries than ever grew in the East. We know it!



## Lawn Mowers

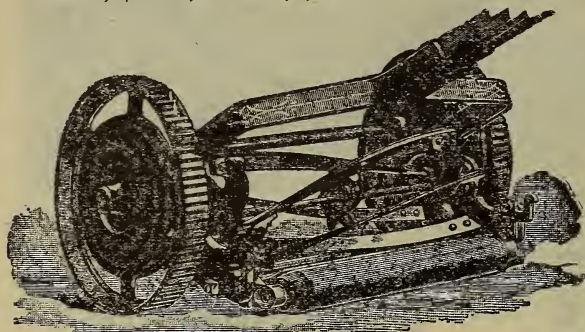
We do not carry a large variety, but we do offer the makes that run easily, wear well and do satisfactory work.

### GREAT AMERICAN BALL-BEARING.

Open cylinder, five blades, 10-inch wheel, solid cast steel butting knives, hardened in oil; steel balls of highest grade, placed in dust-proof steel cup; cuts close; easily adjusted. 15-inch, \$10.50; 17-inch, \$12.50; 19-inch, \$13.50; 20-inch, \$15.00.

**GREAT AMERICA.**—Closed cylinder, three blades, 7-inch wheel; hardened and tempered solid cast steel cutting knives, positively self-sharpening. 12-inch, \$7.00; 14-inch, \$8.00; 16-inch, \$9.00; 18-inch, \$10.50.

**FAULTLESS.**—Best cheap lawn mower for money; has 3 blades tempered tool steel; good adjustment, 14-inch, \$3.50; 16-inch \$4.00.



Great American Lawn Mower.

## Grass Catchers

**SIMPLEX.**—Good, cheap grass catcher. Canvas sides, galvanized bottom, wire frame. No. 1 for 14 to 17-inch mower, \$1.50; 18 to 21-inch, \$2.00.

For Grass Hooks, Shears, Sickles, etc., see page 119. For Garden Hose, see page 115.

## Dunham Water-Weight Lawn Rollers

This roller has a water-tight steel drum which can be filled with water to make it heavy, and emptied when storing away.

The roller is fitted with steel roller bearings and is an easy running, long-wearing machine. Ask for booklet—"The Proper Care of Lawns"—free. We carry the following sizes in stock. We will gladly get larger sizes on orders.

| No.   | Diam.<br>Inches. | Length<br>Inches. | Sections. | Weight<br>Empty | Filled with<br>Water. | Price   |
|-------|------------------|-------------------|-----------|-----------------|-----------------------|---------|
| WB 3  | 14               | 20                | 1         | 65              | 200                   | \$11.00 |
| WB 5  | 18               | 24                | 1         | 80              | 310                   | 14.00   |
| WB 7  | 24               | 24                | 1         | 115             | 500                   | 18.00   |
| WB 11 | 18               | 24                | 2         | 100             | 330                   | 19.00   |
| WB 13 | 24               | 32                | 2         | 160             | 650                   | 25.00   |

During Winter Months freezing and thawing and heavy rains loosen the soil and heave the turf away from the sub-soil, leaving millions of sensitive "feeder-roots" exposed to the air. In the spring when the grass should start growing these roots soon dry out and die.

In summer, too, sun and wind tend to dry out, bake and crack the surface soil around the roots and this is equally harmful to the lawn. A good roller will compress the soil around the roots, and press the turf back against the moist sub-soil so the roots can absorb the water and plant food.

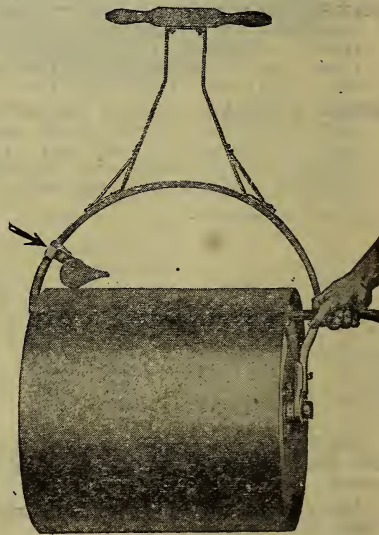
Rolling occasionally throughout the summer (especially after heavy rains) keeps the surface even and prevents the soil drying out. It discourages the work of worms, ants, moles and gives a smooth, even lawn for the mower to run over.

It is absolutely impossible to keep a lawn, large or small, in perfect condition without rolling, no matter how many other things may be done in taking care of it. This fact should be well understood by the large and growing army of Americans who take pride in the beauty of the lawns surrounding their city or country homes.



Before Rolling.

After Rolling.



Dunham Lawn Roller  
(Showing new "No Tip" handle lock and how to fill.)

R. R.'S EVERGREEN LAWN GRASS SEED (page 39) and WONDER ODORLESS FERTILIZER (page 36) makes those beautiful green, velvety lawns so much admired.



## SPRAY PUMPS AND SPRAYERS

We can supply nearly twenty different styles, from a light hand pump to the large powerful power outfits. Hardie Pumps are guaranteed to do the work claimed or your money back.

### NO. 6—HARDIE BARREL PUMP

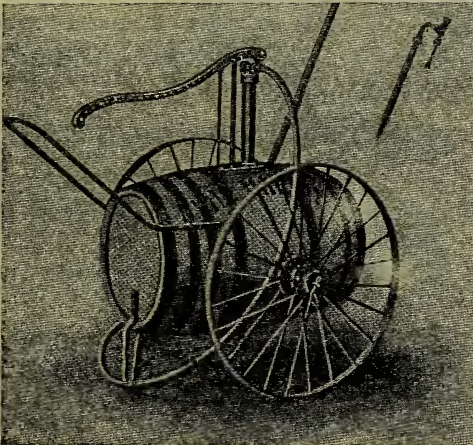
The strongest, most powerful and satisfactory spray pump for mounting on a barrel. With ordinary care will last a lifetime. (See cut and general description.) Works easily and has great capacity, and will easily supply 2 leads of hose and 4 to 6 nozzles, so that 2 persons can spray at one time, doing perfect and rapid work. Furnished with flat plates for end of barrel or tank if so ordered, otherwise it will have plates for side of barrel as shown in cut. Used in outfit No. 17½.

Price, with iron air chamber, \$11.00; with brass air chamber, \$14.00.

### NO. 5—HARDIE BARREL PUMP

Construction same as No. 6 above, but of smaller capacity, but still large enough for any ordinary work. Fitted for 2 lines of hose and 2 to 3 nozzles. This pump is used in outfit No. 21.

Price, with iron air chamber, \$9.50; with brass air chamber, \$11.00.



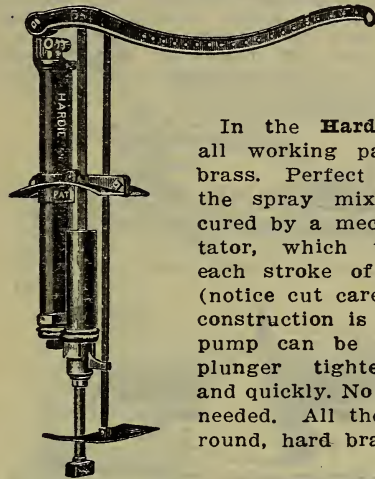
Hardie Wheel Outfit No. 21.

### HARDIE BUCKET PUMP.

A high-grade, all-brass bucket pump, especially designed to meet the long-felt want in this line. It is the only bucket pump on the market that has a mechanical agitator and that is so designed as to always stand in position in the center of the bucket. It can readily be detached from the bucket by unscrewing a nut on the spider. This new device for holding the pump firmly in place in the center of the bucket enables the operator to carry the whole outfit with one hand. A practical outfit for light work. This is the only bucket pump in the market that is giving entire satisfaction. Good-sized air chambers enables one to maintain a high pressure and continuous spray.

Price, including No. 4 Pump, one 5-gallon heavy wooden bucket, three feet best ¼-inch hose, one spraying lance 18 inches long, one spraying nozzle, \$7.00.

To reach the tops of tall trees, you should order, extra, an extension rod. For price of extension rods, see page 115.



No. 6 Hardie.

In the Hardie Sprayers all working parts are of brass. Perfect agitation of the spray mixture is secured by a mechanical agitator, which works with each stroke of the handle (notice cut carefully). The construction is simple. The pump can be repacked or plunger tightened easily and quickly. No pipe wrench needed. All the valves are round, hard brass balls.

### OUR SPECIAL OUTFIT NO. 17½.

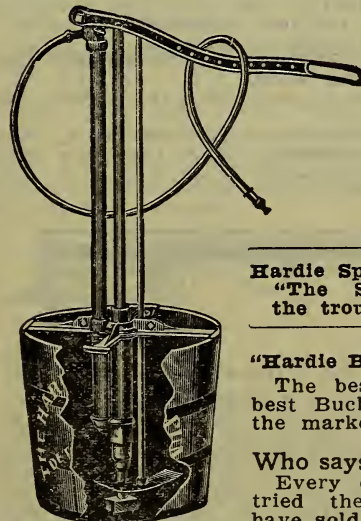
One No. 6 all-brass pump, mounted on barrel, one 15-foot lead best ½-inch hose, one 10-foot bamboo, extension rod with stopcock and drip guard, one 2-cluster Vermorel nozzle, all complete and ready for work.

Price \$21.00; mounted on barrel, \$25.00; extra lead of hose, extension and nozzle, \$5.00 extra.

### OUR SPECIAL OUTFIT NO. 21—(See cut.)

This outfit is designed to meet a long-felt want by the small fruitgrower and gardener. The 30-gallon barrel is mounted on strong wrought-iron wheels, 26 inches in diameter, with 1½-inch tires. No. 5 pump, 5 feet best hose and couplings, 8-foot bamboo rod and leakless stopcock, 1 Vermorel nozzle.

Price \$22.00



Hardie Spray Pumps—  
"The Sprayer with  
the trouble left out"

### "Hardie Bucket Outfit"

The best value and best Bucket Pump on the market.

### Who says So?

Every one who has tried them; and we have sold hundreds.

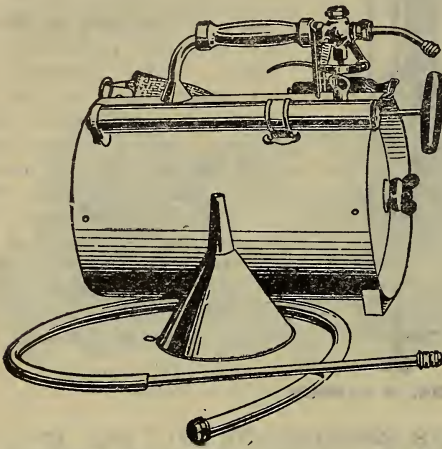
Our experience shows us that if you get a good outfit, one large enough to do your work, you will spray well and as often as necessary; but if you get a cheap outfit or one that is too small, you will become disgusted, throw it aside and let this most important work go undone. Hardie Mfg. Co.'s illustrated catalog on request.



## SPRAY PUMPS—Continued

### LOWELL FOUNTAIN SPRAYER

Every city gardener, florist and poultry keeper needs a Lowell Fountain Sprayer; clean and easy to operate; no need to get any spray on your hands or clothes; will last a lifetime with reasonable care. (Try one at our store.)



**Lowell Fountain Compressed Air Sprayer.**

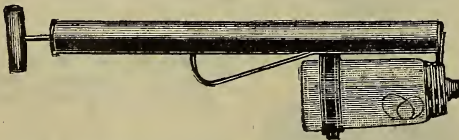
**Special Features:** Capacity 3 gallons; can be carried by the handle (see cut) or a strap that goes over the shoulder. The automatic controlling valve under the handle is easily operated with one finger. You have perfect control of the spray and don't waste any. The air pressure pump is outside where you can get at it, the filler plug is well made and fits tight. The tank after being seamed and riveted is dipped into molten solder, making it absolutely air-tight and the strongest Air Pressure Sprayer made, standing five times the air pressure necessary to operate.

Hose with 4-inch rod, 2 nozzles and filler funnel, with each outfit. The short crook and nozzle shown in the cut is used without the hose when spraying vegetables. For reaching the under side of leaves of low bushes, attach the hose and use the **vine attachment** extension rod. For high spraying use as many **two-foot extensions** as needed. Descriptive booklet on request.

**Price:** No. 111, brass tank, \$8.00; No. 110, galvanized tank, \$5.50. (P. P. 12 lbs.)

**NOTE**—Can be sent by parcel post, but express is safer.

**Extras**—2-foot brass extension rods, each 75c; vine attachment, 2-foot extension with bent neck, each \$1.00. (P. P. 1 lb.)



**No. 3 Glass Tank.**

#### NO. 3 GLASS TANK

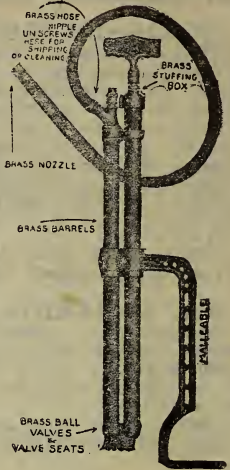
Well constructed, the glass reservoir which is a quart Mason jar, is not affected by any kind of spray. You can have several jars of different sprays (already prepared) and when you wish to change, take out one and put in another. No delay. Extra long air chamber, special plunger and throws a strong, fine spray in any direction. (P. P. 3 lbs.)

**Each (not prepaid), \$1.00**

### O. K. BRASS BUCKET PUMP

(See cut) — Constructed entirely of brass. It is furnished with three feet of best quality rubber hose, detachable; malleable iron stirrup, three interchangeable brass nozzles which throw a fine mist, coarse spray or a solid stream. Pump is provided with large air chamber, with brass ball valves and valve seats. Throws a continuous spray; neat in appearance as well as durable in construction. Much superior to pumps of this class offered heretofore. Look at illustration carefully. (P. P. 7 lbs.)

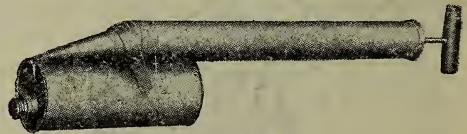
**Price \$3.00**



**O. K. Bucket Pump**

**No. 32, 1 barrel, \$4.00; No. 31, double barrel and lever handle, \$4.50. Description on request.**

### HAND SPRAYERS OF "MERIT"



**No. 7 Perfect.**

The "**Perfect**" Sprayers offered below are well and properly constructed of heavy, high grade material. We offer the "Lowell" line, far superior to most makes. Full size, 20 inches long, capacity 1 quart. Adapted for all kinds of general spraying. Your choice of styles.

**No. 6 or No. 7 (P. P. weight 2 lbs.) your choice, each 50c.**

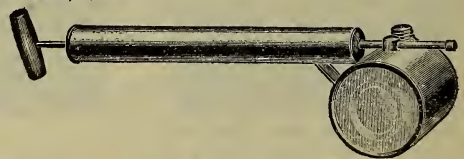


**No. 6 Perfect.**

#### NO. 5 CONTINUOUS SPRAYER

Has 2 spray caps for spraying up, down, straight ahead or at any angle and is so constructed that it not only sprays on the downward stroke of plunger, but also when it is drawn back, thus causing a continuous mist-like spray, enabling one to spray three times as fast and with one-third the labor. Length 20 inches. Capacity, one quart. (P. P. weight, 2 lbs.)

**Each, TIN, 85c; GALVANIZED, \$1.00; BRASS, \$1.50.**



**No. 5 Continuous.**

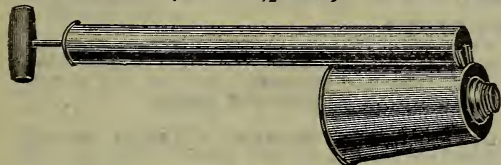
**DON'T WAIT** until the fungi, such as mildew, rust, black spot, etc., have attacked your roses and trees; the fungicide sprays are merely preventives and should be used in the fall or early in the spring. After the disease has developed, it may be too late to save the plant.



## Powder Sprayers, Blowers and Dusters

These are used for applying Sulphur, Bug Death, Dry Bordeaux or insect powder of any kind.

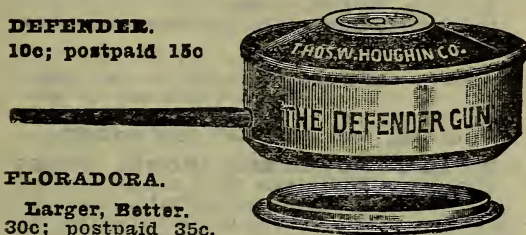
**LOWELL POWDER GUN** (See cut.)—Heavy tin. Finished in aluminum. We give a positive guarantee with each sprayer that it is impossible to draw powder back into the cylinder pump, and if the powder is sifted through a screen and kept absolutely dry it will not clog and throw a fine cloud of powder. The powder can hold one quart. (P. P. 2½ lbs.) Price 90c



Lowell Powder Gun.

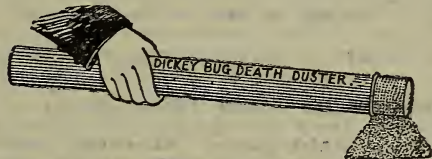
**DEFENDER.**

10c; postpaid 15c



**FLORADORA.**

Larger, Better.  
30c; postpaid 35c.



**DICKEY BUG DEATH DUSTER.**—For using when applying Lime, Dust or Powder of any kind. For use on small gardens this is very handy. Saves powder, puts it on evenly and just where you want it. (P. P. ¾ lb.) Each 35c



**ACRE AN HOUR DUSTER OR SIFTER.**—Bucket shaped, straight sides, made of heavy tin, good handle, holds 5 lbs. powder. A simple twist of the wrist does the work. As its name implies, you can cover an acre of plants an hour. (P. P. 2 lbs.) Each 85c

## NOZZLES, SPRINKLERS, RODS, EXTRAS, ETC.

### LAWN SPRINKLER

Don't waste time holding the hose nozzle—use lawn sprinklers, and change positions as often as necessary.

**Pluvius Lawn Sprinkler**—Upright standard, 3 brass arms. (P. P. 4 lbs.) Each \$1.75

**Monarch or Midget**—Same style as above, only lower. (P. P. 2½ lbs.) Each \$1.35

**Busy Lawn Sprinkler**—Covers 25-foot circle. Very desirable for medium sized yards. (P. P. 3 lbs.) Each \$1.25

**Fountain Sprinkler**—Circular brass tube. Large, \$1.25; postpaid, \$1.35

**Half Circle**—All brass, sprays half circle. Each 50c, postpaid 60c

**Little Wonder**—Cheap, but good. Excellent in small yards. Covers 20 feet. (P. P. 1 lb.) Each 40c

**No. 31—Diamond Hose Nozzle**—Best for sprinkling; adjustable from solid stream to a fine spray. (P. P. ½ lb.) Each 60c

**Mist Hose Nozzle**—All brass, very fine, full, mist-like spray. Each 25c, postpaid 30c

**No. 41—Dandy Hose Mender**—Best mender made, simple and quick; nothing to catch; sure to hold.

Postpaid, ½ in., 15c; ¾ in., 20c

### HARDIE BAMBOO EXTENSIONS

These have seamless brass tubing, leakless stopcock, drip guard, lance and brass connections at each end. (Not mailable.)

Price: 6-ft. \$2.25; 8-ft. \$2.50; 10-ft. \$3.00; 12-ft. \$3.25. These are the lightest and best Extension Rods ever offered, and well worth the difference in price

### EXTENSION RODS—Ordinary Bamboo

|             |        |
|-------------|--------|
| 6-ft. ....  | \$0.85 |
| 8-ft. ....  | 1.00   |
| 10-ft. .... | 1.25   |
| 12-ft. .... | 1.50   |



Bamboo Extension with "Lance" Attached

### SPRAY PUMP NOZZLES

**Single Bordeaux** (Best for Whitewash) ..\$0.75

**Single Vermorel** (Very Fine Spray) ....\$0.75

**Two-Cluster Vermorel** ..... 1.50

**No. 40—Garden Hose Connections.** Both male and female couplings.

½ in. or ¾ in., pair 35c (6 oz.)

**Hose Washers.**

Doz. 10c, postpaid

## SPRAY AND GARDEN HOSE

**XXX GRADE (Non-Kinkable)**—Guaranteed. This hose gives excellent satisfaction. Good enough for any ordinary spraying outfit, and by far the best hose for florists' or gardeners' use. One customer reports that he used a 50-foot length of this grade for 3 seasons continuously, which proves that it is the cheapest hose to buy. We have this on 500-foot reels, and cut any length wanted.

Price, ½ in. 15c; ¾ in. 18c

**SPECIAL SPRAY HOSE.**—The highest grade extra heavy spray hose made; guaranteed. Price, ½ in. only, 20c ft.

**TROUT COTTON HOSE.**—Makes an excellent garden hose for those preferring cotton on account of lightness. Made of 4-ply canvas with a good, thick, rubber lining. Price in 50-ft. lengths only, coupled.

½ in. \$4.50; ¾ in. \$5.50

We offer new stock only of high-grade hose for spray pumps and garden purposes. We advise our customers to buy the best. It is cheapest in the end. Don't buy old stock.



## SPRAYS, INSECTICIDES, ETC.

The best and most economical method of spraying is with an automatic sprayer, which forces the liquid out under air pressure, producing a very fine spray or mist and enables one to spray the top as well as the underside of the leaves, where the insects are always found, this being the most tender part of the plant to feed upon.

**DIPPING OF POTTED PLANTS.**—Place a cloth over the top of pot to keep in the earth and then invert and immerse the plant in the prepared bath.

**ARSENATE OF LEAD (Paste Form).**—For spraying trees and shrubs against the attacks of leaf-biting or leaf-eating insects of all kinds, such as green worms, slugs, etc., that appear on plants, shrubs or trees. Especially valuable for spraying to prevent the codling moth on Apple and Pear, and should be used just before the calyx cups close, for eating insects, whenever they appear. It comes in paste form and is diluted in water at the rate of about 1 oz. to a gallon of water, or 2 to 3 lbs. to 50 gallons of water. (Not mailable.)  
Price: 1 lb. jar, 25c; 5 lbs., \$1.00; 12½ lbs., \$2.30. Low quantity price.

**S-W DRY POWDERED ARSENATE OF LEAD.**—Unquestionably the finest product of its kind. Has many advantages over the paste, easier to mix and requires less, is more efficient on account of its extreme fluffiness, and will adhere longer. Does not deteriorate, harden or freeze, consequently can be carried over. Use 1 to 2 lbs. to 50 gallons of water. 1 to 2 tablespoonsful to a gallon. Put up in sift proof cartons with adjustable tops. This is mailable.  
Prices: 1 lb., 45c; 5 lbs., \$2.00; 10 lbs., \$3.75; postage extra. Quantity price on request.

**SHERWIN-WILLIAMS DRY LIME SULFUR.**—A true type and not to be confused with substitutes or compounds offered on the market. Overcomes disadvantages of the liquid material such as the possibility of freezing, leaky packages, hauling bulky packages, etc. Has all the insecticidal and fungicidal qualities of the liquid material, and all of its advantages with none of its disadvantages. Is absolutely safe and effective not only as a dormant spray for scale, insects, etc. but also as a summer spray in combination with arsenate of lead. From 10 to 12 lbs. Dry Powdered Lime Sulfur dissolved in 50 gallons of water should be used as a dormant spray; from 2 to 3 lbs. to 50 gallons of water in combination with the usual proportion of arsenate of lead should be used for summer spray on all seed fruits such as apples pears, etc.; from 1 to 1½ lbs. to 50 gallons of water in combination with the usual strength of arsenate of lead for summer spray of peaches, plums, and all stone fruits.  
Prices: 1 lb., 25c; 5 lbs., 75c; 10 lbs., \$1.25; 25 lbs., \$2.50; 100 lbs., \$8.00.

**SCALE DESTROYER ("Target Brand").**—An oil spray of decided merit for San Jose scale. Has many advantages over Lime and Sulphur Solution. Being a soluble oil spray it spreads more readily, getting into every little crevice: Will go twice as far, making it as cheap. Has no bad odor and does not discolor foliage, and is much easier and more agreeable to apply. Use one gallon to 20 of water, after the leaves are off and up to time buds appear. For summer spray use one gallon to 100 gallons of water. (Not mailable.)  
Price: Pt. 25c; qt. 35c; gal. \$1.00; 5 gals. \$3.75; 10 gals. \$7.50. Write for price per barrel.

**LIME AND SULPHUR SOLUTION.**—The original and old form liquid spray for San Jose scale. Use 1 part of this liquid

to 9 parts of water. We offer only "Highest Quality." (Not mailable.)

Price: Qt. 25c; gal. 50c; 5 gals. \$1.50; 10 gals. \$3.00. Write for price per barrel.

### BORDEAUX

Very effectual in preventing and checking all fungous diseases, such as blight, black spot, rust and mildew, on trees and shrubs, and scab on Apples and Pears.

**Quick Bordeaux Material ("Target Brand," powder form).**—High grade, easy to use. All ready to mix with water at the rate of 1 pound to 10 gallons of water for winter; use 1 to 20 for summer.  
Original 10-lb. cartons, full directions, \$2.25 (mailable).

**Bordeaux Mixture (Liquid).**—Directions: Winter strength 1 to 50, summer or when leaves are on the bushes 1 to 100.  
Price: Qt. 60c; gal. \$1.25 (not mailable).

**S-W DRY POWDERED FUNGI-BORDO (Bordeaux Mixture).**—This is a perfect dry Bordeaux mixture concentrate in a dry powder, which you receive in sift-proof, impervious packages. Is scientifically founded to insure perfect results, stays in suspension well and adheres to the foliage. It can be used in combination with Paris Green, Arsenate of Lead, or other insecticide with an extraordinary degree of safety. For general use, 8 lbs. of Dry Powdered Fungi-Bordo to 50 gallons of water; one-half strength for summer. (Mailable.)

Price: 1 lb. 35c; 5 lbs. \$1.50; 10 lbs. \$2.50;

**S-W PARIS GREEN.**—This is the most effective, safe and economical Green on the market. Kills the insects but does not blight the foliage. Usually four to six ounces to fifty gallons of water will be satisfactory. Write for prices.

**BLACK LEAF "40."**—A concentrated solution of nicotine sulphate containing 40 per cent nicotine. Indorsed by the foremost experts of the U. S., for red bug, green and woolly aphids, trips, plant lice, codling moth, pear psylla and all sucking insects. Descriptive pamphlet on request.

Price: 1 oz. can 25c, postpaid 30c; ½ lb. can 75c (P. P. 1 lb.), makes 47 gals. spray; 2 lb. can, \$2.50, makes 240 gals. spray; 10 lb. can, \$10.75, makes 1000 gals. spray. (1 oz. and ½ lb. cans only, mailable.)

Note.—Whale oil soap mixed in this solution makes it more lasting, as it sticks better. Use 4 lbs. to 50 gals. solution. Full and detailed instructions with each can.

**WEED KILLER ("Target Brand").**—Guaranteed to destroy weeds, grass, poison ivy and all undesirable vegetation. Keeps roadways and paths free from weeds. Cleans tennis courts and ball diamonds. Cleans alleyways and fence corners. An effective combination of high grade chemicals which diluted in water at 1 to 50 destroys the roots as well as the tops of all vegetation. One gallon diluted will cover 100 to 150 square yards; and one or two applications are sufficient for an entire season. (Not mailable.)

Price: Pt. 40c; qt. 60c; gal. \$1.50; 5 gals. \$6.50. Write for price per barrel.



**"CARCO" VEGETABLE SPRAY**

For many years the gardeners of the Pacific Coast have suffered from a scourge of root-maggots and worms that has made gardening, if not impossible, much more unprofitable than it should have been. Many remedies have been tried with little success until the "Carco" formula was discovered.

A wonderfully successful spray for destroying maggots, grubs and worms which infest Turnips, Radishes, Beets, Rutabagas, Cauliflower, Cabbage, Onions, etc., and also recommended for combatting crown borers in Strawberries.

To get best results, the ground should be sprayed freely before planting, then again as soon as the vegetables come up. Dip cabbage plants in a solution of "Carco" before planting. "Carco" is highly concentrated; use 1 part "Carco" to 100 to 125 parts of water. Descriptive pamphlet and testimonials on request.

Prices: 1/2-pint cans (P. P. weight 1 lb.), 20c; larger sizes not mailable; pints 30c; quarts 50c; half gal. 90c; gal. \$1.75.

**BUG DEATH (Non-poisonous).**

—A most effective powder that kills the squash, cucumber and cabbage bugs, currant worm and all bugs, and worms that eat the leaves of plants and vines. Bug Death is a wonderful protection against insects. Absolutely non-injurious. Contains no arsenic. Kills the bugs, prevents blight, revives and aids the healthy growth of plants and shrubs. Does the work as nothing else will. You can't afford to be without it. Bug Death is generally applied dry, but is very effective mixed with water and sprayed. Use 1 pound to 2 gallons water.

Price: 1 lb. cans with perforated shaker tops, 25c; 3 lbs. 60c; 5 lbs. 90c; 25 lbs. and up 15c lb. Add postage if wanted by mail. Send for pamphlet, "Bug Death," which gives full information.

**BLUE LABEL SLUG DESTROYER.**—This is the first powder of its kind that we ever found to positively kill slugs and keeps them away from young plants. Full directions on each package.

Price: 1 1/2 lb. pkg. 25c (P. P. 2 lbs)

**PURITAN LIME.**—A highly refined lime product. Contains no adulterant and may be used with absolute freedom for the following uses: Water softener and purifier, lime water, mouth wash, preserving eggs, disinfectant and deodorizer, Whitewash, spray and soil conditioner. Descriptive pamphlet gives full information and directions. Sold in sealed packages only.

Price: 1 lb. 10c (P. P. weight 1 1/2 lbs.); 5 lbs. 25c (P. P. weight 6 lbs.) If wanted by mail, add postage.

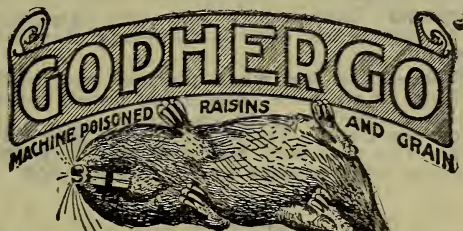
**NICO-FUME**

The purest and most highly refined nicotine product offered for spraying, vaporizing and fumigation in Green Houses. Our Florists like NICO-FUME better than other similar preparations such as Nicotine, To-bak-line, etc., because it is safe and less expensive. Read descriptive pamphlet and be convinced.

Nico-Fume Liquid for spraying or vaporizing: 1/4-lb. tin, 50c; 1-lb. tin, \$1.50; 4-lb. tin \$5.50; 8 lbs. (gal.), \$10.50.

**Nico-Fume Fumigating Paper.**—Quick, safe and effective. Price per can of 24 sheets, 85c (weight —); 144 sheets, \$4.00 (weight 85c (weight 1 lbs.); 144 sheets, \$4.00 (weight 4 lbs.). Add postage. rect from factory for \$7.50, guaranteed fresh.

**FUMOTH FUMIGATORS.**—For killing moths, millers, mosquitoes, mites and lice in hen house, etc. Vapor does not injure clothing, furniture, etc. Full directions on the can. Price 50c; postpaid, 60c



**SURE DEATH TO GOPHERS, SQUIRRELS, PRAIRIE DOGS, RABBITS, RATS AND MICE.**

No more use for traps. Guaranteed to do the work or your money back.

The only prepared poison that will get a gopher. The government advises poisoning as the most effective and best method of exterminating ground pests. Gophergo is a combination that never fails. They are sure to get it, they like it and they eat it. Gophergo has been tested and endorsed by many state experiment stations. If farmers and gardeners would carry a small can of Gophergo when walking around their places and leave a few pellets where "signs" are discovered the pests will soon disappear. Full directions on each can.

Price: 10 oz. can 25c; 1 1/2 lb. can 50c; 3 1/4 lb. can \$1.00. (Add postage.)

**TOBACCO DUST.**—Valuable as an insecticide and fertilizer. Better as a mulch than the stems. Lb. 10c; 10 lbs. 75c

**GRAFTING WAX.**—We sell Target Brand, a high-grade preparation. 1/4 lb. 15c; 1/2 lb. 25c; 1 lb. 35c; postage extra

**WHALE OIL SOAP.**—For aphids, plant lice, etc. Best grade. Postage extra. 1 lb. 10c; 10 lbs. 85c; 100 lbs market price

**SULPHUR POWDER.** Lb. 10c; 100 lbs. market price

**SULPHUR CANDLES.** Each 10c postpaid 15c; 3 for 35c

**Rat Bis-Kit Paste**

The new poison in the tube

Kills Rats, Mice and Roaches Instantly

A New Formula, Guaranteed to kill every time or money refunded. No mixing, no spreading—just press the tube—the paste will spread itself. Clean, simple and sure. Use on any kind of bait. Keeps indefinitely. Price 25c per tube; five for \$1, postpaid



**BY PARCEL POST.**—Note we can now send at parcel post rates (see page 1) any of our Sprays except those marked NOT MAILABLE, but be sure you add postage to cover.



## TOOLS EVERY GARDENER AND FRUIT MAN NEEDS

We give the P. P. (Parcel Post) weights so you can add postage if wanted by mail. Don't forget to send it extra.

### Plant and Rose Stakes

Prices Not Prepaid.

**CEDAR.**—Round; painted green, white top; last and look well. Per doz., 3 ft. 75c; 3½ ft. 80c; 4 ft. 85c; 5 ft. \$1.25; 6 ft. \$1.75; 8 ft. \$2.25.

**BAMBOO.**—Inexpensive and very desirable for pole beans, etc., or flowering plants or shrubs.

**NOTE.**—State for what purpose you want them, as we have them from pencil thickness (¼-inch) up to 1¼ inch.

Price per dozen: 1½-ft. 10c; 2-ft. 15c; 3-ft. 20c; 4-ft. 25c; 5-ft. 30c; 6-ft. 50c; 8-ft. 75c. Write for low price by the 100 or 1000.

### Labels

The tree and pot labels we offer below are strictly No. 1 labels, smooth and well wired. The painted labels are "really painted," not dipped in oil. Ordinary lead pencil writing on the painted labels is always readable; it don't wash off.

#### TREE LABELS. (P. P. 4 lbs.)

|                           | 25     | 100    | M      |
|---------------------------|--------|--------|--------|
| Painted, copper wired ..  | \$0.15 | \$0.30 | \$1.75 |
| Unpainted, iron wired ..  | .10    | .20    | 1.50   |
| Aluminum, copper wired .. | .60    | 2.00   |        |

#### POT AND GARDEN LABELS

|                                    | Wgt. per M. | 25  | 100    | M. |
|------------------------------------|-------------|-----|--------|----|
| Painted, 4-in. (P. P. 3½ lbs.) ..  | .10         | .20 | \$1.35 |    |
| Painted, 5-in. (P. P. 4½ lbs.) ..  | .15         | .25 | 1.50   |    |
| Painted, 6-in. (P. P. 5 lbs.) ..   | .15         | .30 | 2.00   |    |
| Painted, 8-in. (P. P. 15 lbs.) ..  | .20         | .50 | 5.00   |    |
| Painted, 9-in. (P. P. 17 lbs.) ..  | .25         | .65 | 5.50   |    |
| Painted, 10-in. (P. P. 20 lbs.) .. | .30         | .85 | 6.50   |    |

### FLOWER POTS, SAUCERS, ETC.



No. 1 No. 2 No. 3 No. 4  
3—Azalia or Fern Pot; 4—Flower Pot. All styles same prices.

| Size          | Prices Each. | Doz.   | Saucers Each. |
|---------------|--------------|--------|---------------|
| 2-inch .....  | \$0.02       | \$0.20 | ....          |
| 3-inch .....  | .03          | .30    | ....          |
| 4-inch .....  | .04          | .40    | \$0.02½       |
| 5-inch .....  | .06          | .60    | .02½          |
| 6-inch .....  | .10          | .90    | .05           |
| 7-inch .....  | .12          | 1.20   | .07½          |
| 8-inch .....  | .16          | 1.75   | .10           |
| 9-inch .....  | .25          | 2.50   | .15           |
| 10-inch ..... | .40          | ....   | .20           |
| 12-inch ..... | .60          | ....   | .35           |
| 15-inch ..... | 1.50         | ....   | .50           |

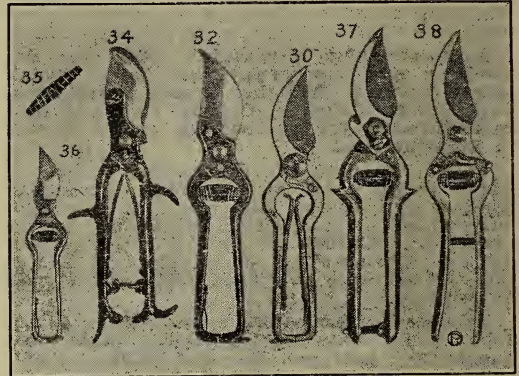
Prices by express or freight. Not mailable.  
Fig. 1—Fern Dish Filler; 2—Bulb Pan;

Should you wish a few small sizes by mail, write for prices packed.

### FLORISTS' SUPPLIES

|                          |                  |        |
|--------------------------|------------------|--------|
| <b>MASTICA.</b>          | Per gal.         | \$1.75 |
| <b>MASTICA MACHINES.</b> | Each             | \$1.50 |
| <b>MOSS.</b>             | Lb. 5c; 100 lbs. | \$3.00 |
| <b>TIN FOIL.</b>         | Lb. 20c; 10 lbs. | \$1.75 |
| <b>RAFFIA.</b>           | Lb. 30c; 10 lbs. | \$2.25 |

**WIRE HANGING BASKETS** (Not mailable).  
6-in. 15c; 8-in. 20c; 10-in. 25c; 12-in. 35c;  
14-in. 50c.



### PRUNING SHEARS

| No. | (See Illustration)   | Each   |
|-----|--|--------|
| 36  | —5½-inch, nickel plated, spiral spring, for rose bushes or light pruning (P. P. 4 oz.) .....   | \$1.00 |
| 37  | —9-inch, new style, with wire cutter; highest grade (P. P. 1 lb.) .....                        | 1.75   |
| 32  | —8-inch, black finish, good but cheap .....  | .75    |
| 30  | —9-inch, full polish, double brass spring, extra good shear (P. P. 1¼ lbs.) .....              | 1.50   |
| 32½ | —Same as 32, extra heavy, black, 9-inch (P. P. 1 lb.) .....                                    | 1.50   |
| 34  | —Black, with polished blade; best cheap (P. P. 1 lb.) .....                                    | .75    |
| 38  | —9-inch, new imported, patent fastener, bright finish, best for heavy work (P. P. 1 lb.) ..... | 1.75   |
| 35  | —Extra spiral springs Postpaid .....   | .15    |

### CEMETERY VASES

**TIN.**—Nothing nicer for holding flowers at the graves. Made of heavy tin and painted green. Conical, long wire point to push into the soil. Large, 25c;

Med., 20c; Small, 15c each; postage 10c extra  
**GLAZED POTTERY.**—For same use. Richer and more lasting.

Each 25c; not mailable

### SPRINKLING CANS

**TIN.**—Strong and well made; 4-qt. 35c; 6-qt. 50c; 8-qt. 60c; 10-qt. 75c; 12-qt. 85c

**GALVANIZED.**—Extra heavy. 4-qt. 50c; 6-qt. 60c; 8-qt. 70c; 10-qt. 85c; 12-qt. \$1.00

### PLANT TUBS, KEGS, ETC.

For containers to hold flowering plants, palms, evergreens, etc., we offer the following:

**Wooden Plant Tubs.**—Machine made, painted green. Each, 12 in., 75c; 14 in., 90c; 16-in., \$1.00.

**Japanese Kegs.**—Empty juice kegs, natural color; heavy ornamental woven hoops. Each, 12-in., 60c.

**Garden Pots.**—Red clay, — inches deep, diameter 16 inches. Each \$1.50; 18-in., \$2.25; 20-in., \$3.25.

**Fancy Garden Urns.**—Heavy and massive with figures and designs. \$3.00 to \$10.00 each.



## Miscellaneous Tools That Every Gardener Needs



### DANDY-LION WEED KILLER

A new, simple, yet practical tool that is **automatic, quick and sure in its work**. Cutting or pulling off the tops of weeds only makes the roots grow more vigorously; digging them out with a knife gives one the backache or lame knees, therefore use the "Dandy-Lion" same as a cane.

You simply fill it with solution (of gasoline, salt or vitriol, directions tell how) put the point on the root crown of the weed press a little, swing the top around in circular movement to open a hole and press down until the cross bar on the point (see cut) releases the fluid. **The solution kills the root and all.**

The amount of solution deposited can be regulated. Spring, valve and base removable. **PRICE, NO. 1, Brass Covered, \$1.25; NO. 2, Solid Brass, \$1.60. P. P. Weight 3 lbs. (Add postage.)**

### "ALCA" GARDEN TOOL

Best all-around garden tool made. This remarkable combination tool is a trowel, fork, hoe, weeder and dibble—all in one. A spring releases the particular tool you desire. Light but strong and handles nicely. (15 inches long—see cut). **Price 50c, postpaid 60c**

### WEEDERS

| No. | (See Illustration)                  | Each  |
|-----|-------------------------------------|-------|
| 2—  | Excelsior.—Five claws (P. P. 1 lb.) | \$.20 |
| 3—  | LANGS.—Very handy (P. P. 1 lb.)     | .25   |
| 4—  | DIAMOND.—Very popular (P. P. 1 lb.) | .25   |
| 5—  | FOK.—Fine for digging (P. P. 1 lb.) | .20   |

### GRASS SHEARS

| No. | (See Illustration)   | Each   |
|-----|--|--------|
| 6—  | B B A.—6½-inch; high grade; best on the market (P. P. 1¼ lbs.) | \$1.00 |
| 7—  | 5½-inch blade; good value (P. P. 1 lb.)                        | .40    |

### TROWELS

| No. | (See Illustration)  | Each |
|-----|---|------|
| 9—  | 6-inch steel blade (P. P. 1 lb.)  | .35c |
| 10— | Very strong, all steel; 6-inch (P. P. 1 lb.)                            | .50c |
| 11— | Same grade as No. 10, but has a 5-inch blade (P. P. 1 lb.)              | .40c |
| 12— | Best low-priced; 6-inch blade (P. P. 1 lb.)                             | .15c |
| 13— | MAYNARD.—6-inch steel blade and shank; highest grade made (P. P. 1 lb.) | .60c |

Remember—We sell Budding and Grafting Knives, Branch Shears, Garden Forks, Rakes, Spades Hoes etc. Our illustrated and priced pamphlet on request.

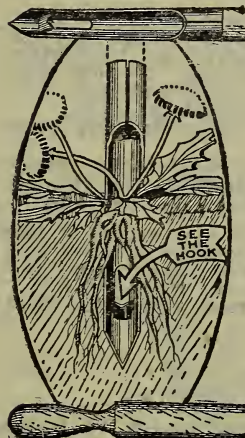
**Note.**—We give the P. P. (Parcel Post) weights so you can add postage if wanted by mail. Don't forget to send it extra.

### JARDINIERES, ETC.

We carry in stock a large and complete assortment of the best styles and latest designs. Limited catalog space will not permit us to illustrate and describe them, but we are sure we can please out-of-town customers if they will give us inside measurements required, and say how much they want to spend. State color and shape.

### HALL DANDELION PULLER

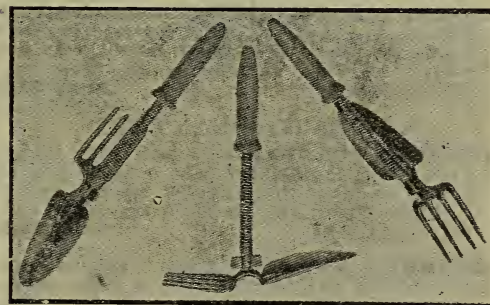
Here s a tool that gets the dandeloin roots and all, and operator stands up. No wet knees or aching back.



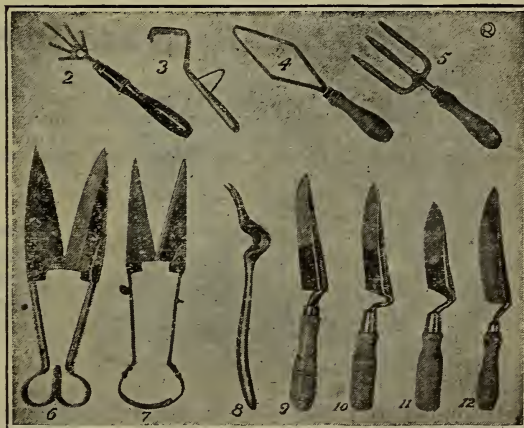
Hall's Dandelion Puller.

**Directions.** — Just push the blade down in the ground close to the weed, press towards the weed and pull up. A patent hook near point of blade does the trick. A slot prevents dirt from clogging the hook. Study the illustration carefully. Is made of polished steel and will last a lifetime. The only successful dandelion weeder to date. Wooden handle 30 inches long, steel part 8 inches.

Price 50c; (P.P. 1 lb.)



Alca Garden Tool.





## Hall's Garden Cultivator

The best garden tool on the market—no where else will you find a better made, better equipment for such a low price.

Handle quickly adjustable without a wrench—adjustable draft for light and deep cultivation.

**Swing Frame** gives the plow a hang or balance—making it easiest running plow on market. The extended curved handle insures steady, even draft.

Each tool furnished is carefully sharpened, polished, and will scour in any soil.

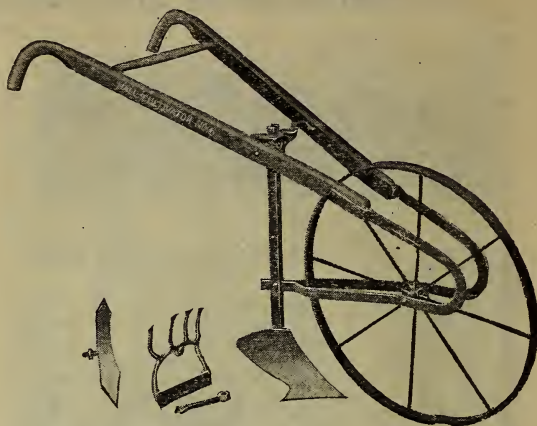
**Tools Furnished.**—Plow or mould board for cultivating, hilling, plowing, covering seed. **Rake** for cultivating, harrowing. **Weeder** for cutting weeds. **Double Diamond Point** for marking seed rows, etc. Strong 24-inch wheel. Weight, 22lbs.

Price, complete, only \$4.50

**EXTRAS.**—3-Prong, Adjustable, Steel-Tooth Cultivator Attachment (P. P. 1½ lbs.), 50c; 5 Prong (P. P. 1½ lbs.) 75c.

**No. 1 Hall.**—Same as No. 6, except it has straight to axle adjustable handles and 16-inch wheel. Can be taken apart and sent by parcel post (P. P. 14 lbs.).

Price, complete, \$3.50



Hall's No. 6 Garden Plow and Cultivator

## Cahoon Broadcast Seeder

The standard broadcast seed sower, made of steel, iron and brass, will last a lifetime. Has force feed. Every farmer should have one, as it sows perfectly any kind of seed or grain. Full instructions with each machine. (P. P. wgt. 10 lbs.)

Price \$3.50

## CORN PLANTERS

**ACME.**—Two-hand type; length 35 inches; a popular and successful planter; sure in its work. Will plant corn, peas and beans. (See cut.) (P. P. 6 lbs.)

Price \$1.00

**SEGMENT AUTOMATIC.**—One-handed type; length 34 in. Can be adjusted for corn, beans or peas. You plant accurately and evenly as fast as you walk. (See cut.) (P. P. 7 lbs.)

Price \$1.50

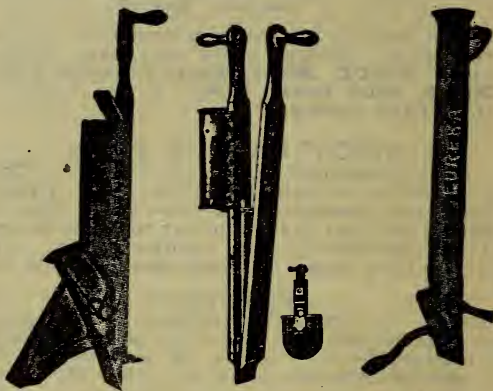
## POTATO PLANTERS

**EUREKA TUBULAR.**—Length 36 inches. This is the lightest and best tubular planter made; opens automatically as the top of it is moved forward in walking. (See cut.) (P. P. 5 lbs.)

Price \$1.50

**PINGREE.**—Same as Eureka, without the tube down the handle. It is light and a very satisfactory planter. (P. P. 5 lbs.)

Price \$1.00



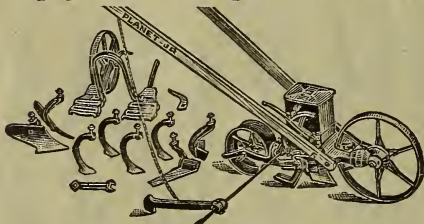
Segment.

Acme.

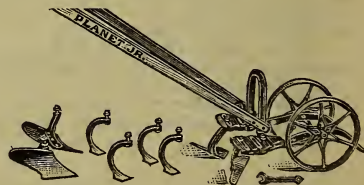
Eureka.

## Planet Jr. Hand and Horse Seeders and Cultivators.

Now used and recognized the world over as the most practical, best constructed and most useful time, labor and money saving implements on the market today. Every gardener large or small should investigate the latest models, which are priced very low. Space in this catalog will not permit us to tell you all about these tools, but we will gladly send Planet Jr. 64-page 1917 Catalog and Price List free on request.



TIME  
LABOR  
AND  
MONEY  
SAVERS



Combined Hill and Drill Seeders from \$8.25 to \$16.50.

Single and Double Wheel Cultivators from \$4.25 to \$10.00.

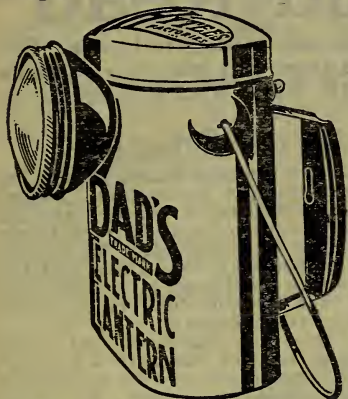
**REMEMBER**—A request on post card will bring the handsome Planet Jr. illustrated, descriptive and priced catalog.



Safety First  
Cheaper than Oil

## DAD'S ELECTRIC LANTERN.

The Light  
of All Lights



No. 1 General Purpose.

These are a little out of our line, but of great merit and of such value to the majority of our customers that we have decided to stock them.

Dad's Electric Lantern is a full-sized search-light lantern. It stands 7½ inches tall, 5¼ inches wide, 2¾ inches thick, excluding the projecting ball, headlight and handle. It's the most wonderful light ever invented for all general purposes. It's in a class entirely by itself and should not be confused with flash-lights or so-called electric lanterns using one cell.

The dry cell container, or body, is so constructed that there is no possible chance for prematurely "run-down" cells, short circuits, etc.

Dad's Electric Lantern uses two ordinary standard 6-inch dry cells (or batteries), obtainable from us by parcel post or any Electric, Hardware or Gun Store, or any General Merchandise Store in any city or small village.

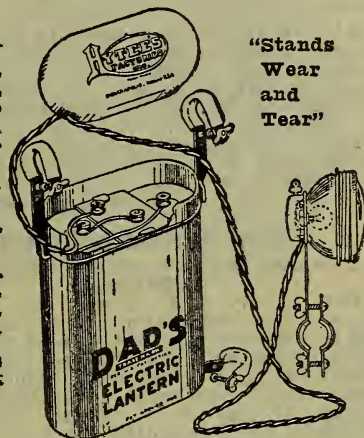
**THE LIGHT OF ALL LIGHTS—WIND, RAIN AND WEATHER PROOF**

### THE LIGHT FOR A THOUSAND USES

**DAD'S GENERAL PURPOSE PORTABLE LANTERN** (See cut)—A wide angle real light, that you can work by, in the barn, woodshed, cellar, garage, house, sick room, etc., etc. Light is turned on or off in a second—no matches to scratch or danger from fire. If placed to one side of a living room or work shop, it will light brilliantly the three walls and floor. Can be set down or carried by the ball or handle on the back. Ideal for Hunters, Fishermen, Campers and Travelers.

Can be fastened to any vehicle or motor by using one of Dad's Adjustable Holder Brackets (see cut).

**SPECIAL VEHICLE LANTERN** (See Cut)—Excellent for use on Bicycles, Buggies, Motorcycles, Wagons, Boats or Automobiles, easily and quickly attached. The regular Diffusing Reflector will throw an even, bright light over a wide circle and for 75-foot distance, while the Search Light Reflector throws a powerful, illuminating, brilliant light 300 feet or more.



"Stands  
Wear  
and  
Tear"

### Price List of Dad's Electric Lanterns and Extras

Dad's No. 1 General Purpose Lantern, without dry cells \$2.25 (mailing weight 2½ lbs.); complete with 2 dry cells \$3.00 (mailing weight 7 lbs.)—add postage if wanted by parcel post. (Get dry cells at your store and save postage.)

Dad's Battery Case Bicycle and Vehicle Lantern Style No. 10, is ½ lb. heavier and costs 50c more than Dad's No. 1.

Dad's Adjustable Holder Bracket, Style 40, for holding No. 1 Lantern on Vehicles, etc., \$1.00 (weight 2¾ lbs.)—add postage if wanted by parcel post.

No. 30 Special Head Light (no battery case), with 5-foot cord and switch key on light, \$2.25 (P. P. wgt. 1 lb.).

Extra Search-Light or Diffusing Reflectors 50c, postpaid 60c.

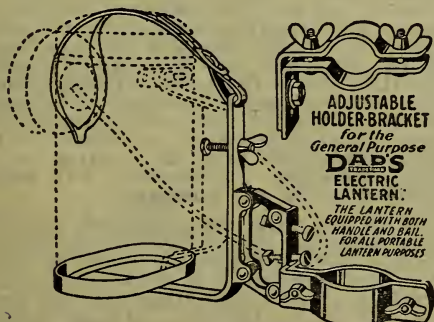
Extra Lens (White or Red), 25c, postpaid 30c.

Extra Electric Tungsten Bulb, 30c, postpaid 35c.

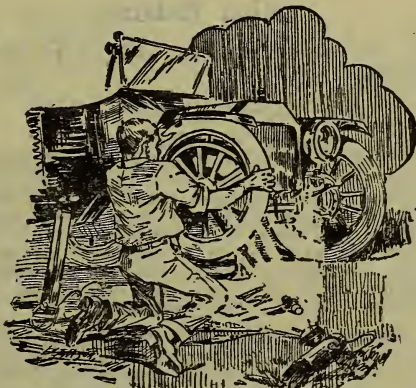
Dry Cell Batteries (weight 2½ lbs.), 40c each.

### No. 10 Vehicle Lanterns

No Chimneys to Clean.  
No Dangerous Matches.  
No Explosive Gasoline.  
No Greasy Kerosene.  
No Ill-Smelling Carbide.  
No Disagreeable Odors.  
No Dirty Black Wicks.  
No Heat and Smoke.  
No Trouble & Attention.  
No Soot, Grease, Grime.  
No Globes that Break.  
No Empty Oil Lanterns.



ADJUSTABLE  
HOLDER-BRACKET  
for the  
General Purpose  
**DAD'S**  
ELECTRIC  
LANTERN.  
THE LANTERN  
EQUIPPED WITH BOTH  
HANDLE AND BALL  
FOR ALL PORTABLE  
LANTERN PURPOSES



An all around "emergency" light—penetrates to the root of auto troubles. New and novel.

Pamphlet giving other information and illustrations on request.



# Books You Should Read

Save time, energy and money by reading these practical and up-to-date books. Did you ever stop to think that a few hours' reading now and then will give you valuable information that it has taken others YEARS OF LABOR AND EXPERIENCE to obtain?

## Garden Making.

By L. H. Bailey. In this book the beginner in gardening is shown how easy it is to raise flowers, fruits and vegetables, and to beautify one's home grounds, if one starts right and has a genuine love for plants. Illustrated, 5x7 inches, 417 pages, cloth, **85c postpaid**.

## Asparagus.

**Its Culture for Home Use and for Market.** A practical treatise on the planting, cultivation, harvesting, marketing and preserving of Asparagus, with notes on its history and botany, by F. M. HEXAMER.

All are agreed that there is no more delicious vegetable than properly grown and prepared asparagus. Yet it is but rarely found in our gardens. This book covers all details. As no garden is complete without an asparagus bed, so is no gardener's or farmer's library complete without this interesting and instructive book. Handsomely illustrated, 5x7 inches, 174 pages. Cloth, **Price, postpaid, 60c.**

## New Rhubarb Culture.

**A Complete Guide to Dark Forcing and Field Culture.**

Part I.—By J. E. Morse, the well-known trucker and originator of the now famous and extremely profitable new methods of dark forcing and field culture. Explains and describes in a clear and concise manner every detail connected with the industry.

Part II.—By G. B. Fiske. In this are described and illustrated other methods practiced by the most experienced market gardeners, greenhouse men and experimenters in all parts of America, etc.

Copiously illustrated from photographs and sketches made exclusively for this work. The only complete, practical, scientific and up-to-date manual on this crop. 5x7 inches, 130 pages, cloth. **Price, postpaid, 60c.**

## Carrots, Mangold-Wurzels, Etc.

By J. J. H. Gregory. How to raise them, how to keep them, and how to feed them. Paper, **40c postpaid**.

## Onion Raising.

By J. J. H. Gregory. What kinds to raise, and the way to raise them. Paper, **40c postpaid**.

## Our Farm of Four Acres

### Money We Made By It.

This work is written by a woman who describes in its pages her experiences in selecting and managing a small farm; the first difficulties encountered; details of making butter and bread; care of poultry and pigs; gardening, etc. It is a model in style, and while conveying many useful suggestions, portions of it are fully as interesting as a romance. Paper, **40c postpaid**.

**OTHER SUBJECTS.**—We would be glad to secure for you from our publishers any book you might wish on the following subjects: Agriculture, Farm Machinery and Motors, Special Crops, Fertilizers, Farm and Garden Vegetables, Fruits and Fruit Culture, Plant Breeding, Propagation and Pruning, Flowers and Ornamental Plants, Irrigation and Drainage, Landscape Gardening and Forestry, Pests, Insects, Plant Diseases and Weeds, Dairying and Dairy Farming, Stock Breeding and Feeding, Sheep, Swine and Goats, Horses—Riding, Driving, Training, Veterinary Science and Practice, Poultry—Pigeons and Birds, Bees and Bee Keeping, Dogs, Cats, etc.; Canning and Preserving. **State particular subject interested in and we will quote prices.**

## Barn Plans and Outbuildings.

New, revised and greatly enlarged edition, modernized and brought up-to-date. Edited by **EDWIN C. POWELL**. A really valuable guide to those intending to build new barns or to remodel old farm buildings. With modern ideas, proper sanitary conditions and the use of labor-saving implements, a barn that ten years ago was considered perfect would not meet present requirements.

All descriptions and directions so plain and clear as to be readily understood by anyone. This book contains a wealth of designs and plans for a very small sum; 375 illustrations, 5x7 inches, 404 pages. Cloth, **postpaid, \$1.10.**

## Beginner's Guide to Fruit Growing.

A simple statement of the elementary practice of **propagation, planting, culture, fertilization, pruning, spraying, etc.**, by F. A. Waugh. Just the right kind of a book at last. Well illustrated, 5x7 inches, 120 pages, **price, 85c postpaid.**

## The Pruning Book.

By L. H. Bailey. This is the first American work exclusively devoted to pruning. It differs from most other treatises on the subject in that the author takes particular pains to explain the principles of each operation in every detail. Specific advice is given on the pruning of the various kinds of fruit and ornamental trees, shrubs and hedges. Considerable space is devoted to the pruning and training of grapevines, both American and foreign. Every part of the subject is made so clear and plain that it can be readily understood by even the merest beginner. Illustrated, 5x7 inches, 530 pages, cloth, **\$1.60 postpaid.**

## Dry Land Farming.

By Thomas Shaw. This book has been written in the hope that it will furnish information that may be safely followed by the dry land farmer in the prosecution of his work. When writing it, special consideration was given to the crops that may be successfully grown in the various sections of the dry land area and to the best methods of growing them. The dry farmer will find it a helpful and reliable guide. Illustrated, 5x7 inches, 460 pages, **\$2.20 postpaid.**

## Alfalfa.

By F. D. Coburn. Its growth, uses and feeding value. The fact that alfalfa thrives in almost any soil; that without reseeded it goes on yielding two, three, four and sometimes five cuttings annually for five, ten, or perhaps 100 years; and that either green or cured it is one of the most nutritious forage plants known, makes reliable information upon its production and uses of unusual interest. Such information is given in this volume for every part of America by the highest authority. Illustrated, 5x7 inches, 164 pages, cloth, **60c postpaid.**

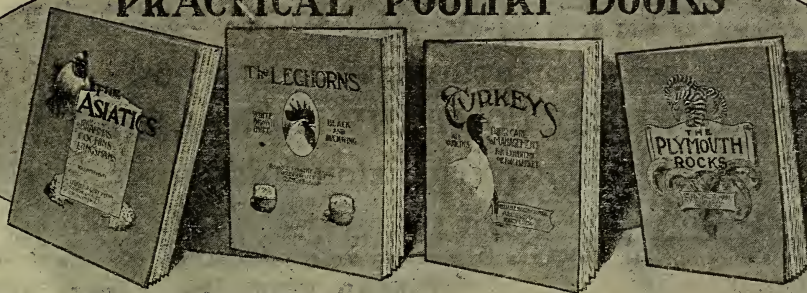


## Miscellaneous Farm and Garden Books—Continued

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| Practical Fruit Grower.—(Maynard), 128 pages                 | .60             |
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| Tomato Culture.—Western (Littooy)...                         | .25             |

## PRACTICAL POULTRY BOOKS



The best authorities have written and illustrated these books. Each breed needs different care and management, therefore read the latest edition on the breed you are interested in. New colored plates in the special breed books.

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| Artificial Incubating and Brooding.—96 pages | \$ .50          |
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**AMERICAN STANDARD OF PERFECTION.**—Latest color-plate edition, profusely illustrated. The only authorized guide for producing standard-bred or exhibition fowls. It is the book that poultry judges use at the poultry shows and that expert poultry raisers use in selecting and mating their breeding stock. Price, postpaid, \$2.00; Leather Binding, \$2.50

## Cyphers Poultry Books

The only series devoted exclusively to the business of poultry culture for market purposes. It is entitled, "The Cyphers Series on Practical Poultry Keeping," and the books are strongly recommended by all who have purchased them. They are all about 8-11 inches, 128 pages, nicely illustrated with linen finish cover. Your choice 50c each; full collection (6) only \$1.25 postpaid.

Cyphers.—Profitable Poultry Keeping in all Branches.  
Cyphers.—Profitable Care and Management of Poultry.  
Cyphers.—Capons for Profit.

Cyphers.—Profitable Poultry Houses and Appliances.  
Cyphers.—Profitable Egg Farming.  
Cyphers.—Profitable Market Poultry.

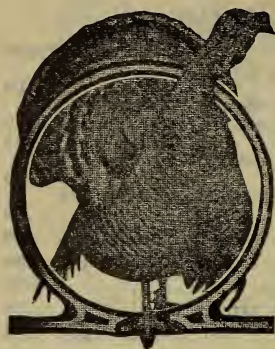
## Pigeons, Rabbits, Pets, Etc.

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| Squabs for Profit                  | \$0.55          |
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| Feathered Pets.—140 pages             | .25    |
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The above Books are all up-to-date and will make you \$ if you read and study them.





# Routledge Seed & Floral Co.'s

**UP TO DATE**  
"HIGHEST QUALITY"

## POULTRY SUPPLIES

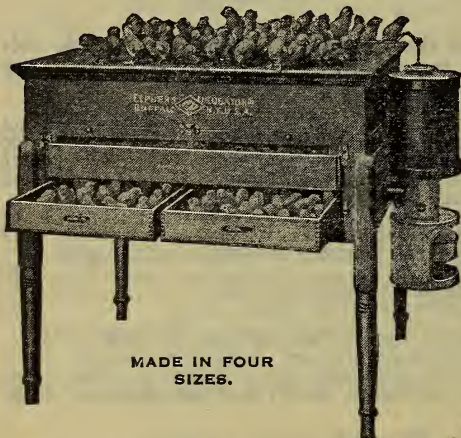
We are devoting the following pages of this catalog to incubators, brooders, poultry supplies of all kinds, poultry food, remedies and insecticides, etc., and are offering you what we believe to be the best line of poultry supplies in the West. We have practically everything needed and used in the profitable rearing and keeping of poultry.

**OUR MOTTO**, "Quality first—price as low as we can make it," will be strictly adhered to in this department, as well as in our other stocks.

### WE ARE AUTHORIZED AGENTS FOR CYPHERS COMPANY INCUBATORS

#### MADE IN THREE STYLES—EIGHT DIFFERENT SIZES

For the season of 1917 we offer our customers the Cyphers Incubator Company's complete line of Incubators. These **three styles** of high-class, guaranteed hatching machines running through **eight different sizes**, represent all that is efficient, convenient and reliable in incubator construction. In buying a Cyphers Company Incubator you take no chance.



MADE IN FOUR  
SIZES.

No. 2 Cypher's 244 Egg Size.

**READ THIS:** For 5 years we have sold Cypher's Incubators and Brooders and have had no complaints. Every buyer has been fully satisfied as far as we know. This is a record that could not have been made with any other line. **WE KNOW**—"We've been there"—the writer having sold in his 20 years' experience on this Coast every well known make.

#### Standard Cypher's Incubators

The CYPHERS' INCUBATOR is known as the "business incubator of the age." It has **WON ITS WAY** in all parts of the world because it gives the **BEST RESULTS**. It is used on more Government Agricultural Experiment Stations, on more Large Practical Poultry Plants, on more successful Egg Farms, and by more prominent Poultry Fanciers than all other makes combined. It hatches a **LARGER PERCENTAGE** of the eggs entrusted to it, and produces **LARGER**,

**STRONGER, HEALTHIER** and more **VIGOROUS** chicks and ducklings than any other Incubator ever built. This is the CYPHERS guaranty!

**CYPHER'S INCUBATORS** are built to hatch and to last. With proper care—the same car you would give a valuable piece of household furniture—a Standard Cyphers will last an ordinary lifetime. They are guaranteed by us to last **ten years** without repairs. We make this guarantee because they have lasted much longer than this—and are still doing first-class work.

These are machines that for **nineteen years** have been recognized as the "standard hatchers of the world." Tens upon tens of thousands of them have been sold and are in successful use in every civilized coun-

try on the globe. They are the last word to date in incubator building, not a penny being spared anywhere in their construction to make sure of their doing satisfactory work in all climates, under widely different conditions, in the hands of all sorts of people.

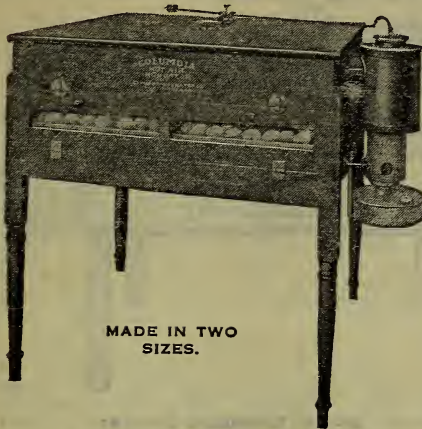
#### PRICES AND SIZES

Built in four popular sizes and at prices as follows: 70 eggs, price complete, \$17.50; 140 eggs, price complete, \$26.50; 244 eggs, price complete, \$39.50; 390-400 eggs, price complete, \$46.50. Satisfaction, or your money back.

**FREE IF INTERESTED**—If you want to know more about Cypher's Incubators and Brooders we will gladly mail copy of Cypher's 1917 Catalog free.



## CYPHER'S COMPANY INCUBATORS—Con't.



MADE IN TWO SIZES.

Cypher's Columbia.

## Columbia Hot Air Incubators

Are built to meet the widespread demand for large capacity, lamp-heated machines that can be sold at surprisingly low prices and yet be guaranteed to do high-class work. Have wooden cases, attractively finished in dark green, with brass trimmings and double walls. Seamless-bottom lamp bowls, best quality brass burners, zinc and steel Standard Cypher's toggle-joint thermostat and same regulating equipment as used on highest priced machines. Fume-proof, forced draft heater, asbestos covered and metal banded. Automatic in ventilation and embodies diffusive principle. Roomy chick nursery under egg trays.

## PRICES AND SIZES

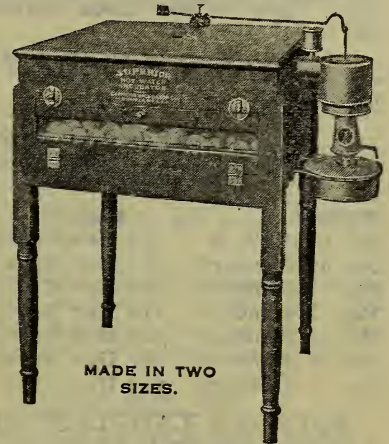
Are made in two sizes: 140 EGGS, price complete, \$19.50; 250 EGGS, price complete, \$26.50. Fully guaranteed.

## Superior Hot Water Incubators

These machines are exactly what the name says. They are heated by hot water, instead of with hot air, and are "superior" in every detail. The water boiler and tank (tubular) are of heavy-weight copper. Lamp has seamless bowl; burner is best on market. Incubator case is of wood, attractively finished in golden brown, with brass trimmings (hinges, buttons, etc.) and has double walls, with air space insulation. Are equipped with Standard Cypher's zinc and steel toggle-joint thermostat and knife-edge regulator. Have forced water circulation and are automatic in ventilation. Roomy chick nurseries.

## PRICES AND SIZES

Are built in two sizes: 65 EGGS, price complete, \$13.75; 130 EGGS, price complete, \$19.50. Fully guaranteed.



MADE IN TWO SIZES.

Cypher's Superior.

## Cypher's Electric Incubators and Hovers

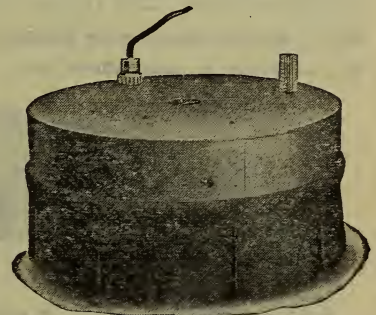


**CYPHER'S ELECTROBATOR.** Made in two sizes, finely finished, quarter sawed oak cases. NO. 1 Electrobator, capacity 60 hen eggs, price \$21.00. NO. 2 ELECTROBATOR, capacity 120 hen eggs, price \$27.00.

**CYPHER'S ELECTROHOVER.** Is both portable and adaptable. Can be used anywhere, just as shown in picture, provided the room temperature does not go below freezing. In colder temperature—and to save waste of heat—should be enclosed or encased. Is electrically-heated, noncombustible, self-regulating and bears the Fire Underwriters' "Inspected Brooder" label as a separate device. Capacity 75 newly hatched chicks. Price \$13.00.

The use of electricity in hatching and brooding has several advantages over the usual methods. Convenience in operation and saving in labor are important items, while absence of fumes and gases allows of locating the apparatus wherever most convenient. Regulation is simple and accurate, and is electrically controlled. Heat distribution by this method is very uniform.

The use of both the Electrobator and Electrohover is very simple and easy. Poultry keepers will find the help of electricity reliable, economical and extra convenient.



Electrohover.

**GIVES ALL THE DETAILS.**—Cypher's 1917 fully illustrated and descriptive catalog free on request.



## BUCKEYE HOT-WATER INCUBATORS AND BROODERS

Limited space in this catalog will not permit us to go into detail and tell you "all the good things" about the Buckeye Incubators, but we will gladly mail to you, on request, a fully illustrated and descriptive catalog.

The Buckeye Incubator Company guarantee their incubators to **hatch more chicks and stronger chicks** than any other incubator, to require no artificial moisture, to operate satisfactorily and to require no attention to the regulator from the time a hatch is started until it is finished. They also guarantee all the mechanical parts.

The Buckeye Incubator Company, who claim to have sold over 400,000 incubators to date, stand back of this guarantee. Could you ask for more?

We have sold Buckeye for five years and they have given **great satisfaction**. We believe they are one of the best hot-water incubators on the market today. They are **well made, operate easily, and hatch well**.

The Buckeye is so simple that a boy or girl can operate it. That's the secret of its wonderful success.

### 1917 BUCKEYE PRICES

Made in **six sizes**, from 60 egg to 600 eggs and priced **very moderately**.

| Number          | Capacity          | Price   |
|-----------------|-------------------|---------|
| No. 15 Style H  | 60 Hen Eggs.....  | \$11.50 |
| No. 60 Standard | 60 Hen Eggs.....  | 15.00   |
| No. 1 Standard  | 110 Hen Eggs..... | 22.50   |
| No. 2 Standard  | 175 Hen Eggs..... | 27.50   |
| No. 3 Standard  | 250 Hen Eggs..... | 35.00   |
| No. 4 Standard  | 350 Hen Eggs..... | 39.50   |
| No. 5 Standard  | 600 Hen Eggs..... | 65.00   |

### BUCKEYE LAMPLLESS BROODERS

These Lampless Brooders are so constructed that the heat of the chick's body is retained under the felt hovering, where the little babies are "as snug as a bug in a rug."

They require no lamp, consequently less care and less expense.

For use in cold sections, or very early in the Spring, we believe that the heated brooder is preferable, unless you will keep the lampless brooders in a heated room or house. However, they make an excellent and inexpensive "second brooder" for the older chicks. **Each, 25 chick size, \$1.50; 50 chick size, \$2.00.**

**BUCKEYE HOT WATER, SELF-REGULATING BROODERS.**—Well made and properly constructed. Equipped with automatic heat regulator and overhead hot water tank. Very easy to operate. Lift the top off to clean out.

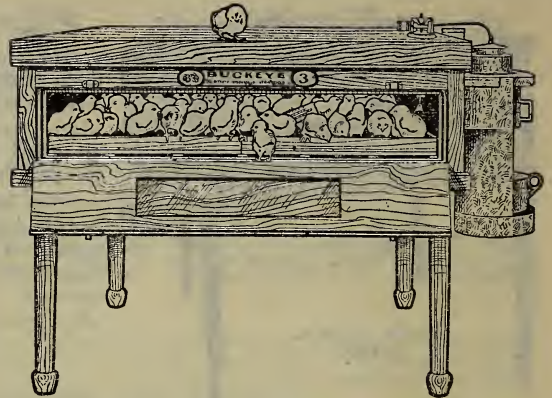
No. 1 Indoor, hover part 20x20 in.....\$6.00

No. 2 Outdoor, size 20x44 in.....\$8.50

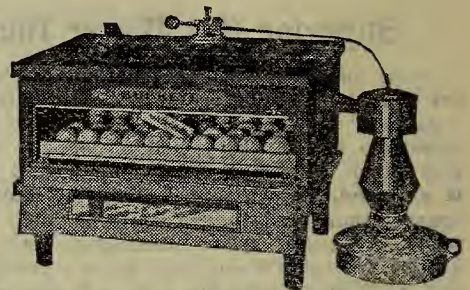


Buckeye No. 2 Outdoor, 2 Compartment, Self-Regulating Brooder

Can be used outside in any kind of weather. Rain and wind-proof.

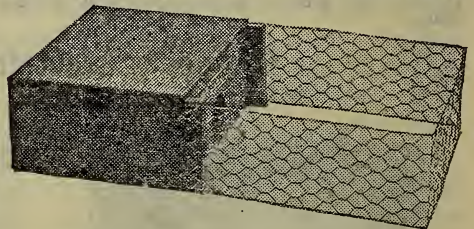


Latest Model Standard Buckeye

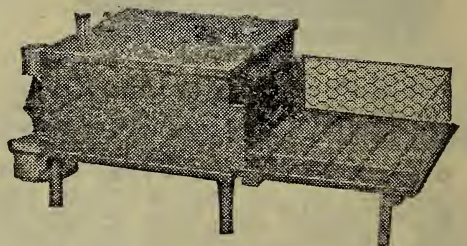


Buckeye Style "C" 50 Egg

Small, low-priced, yet successful. Self-regulating, self-ventilating, hot-water incubators. 50 egg capacity. Good value. **Price \$7.50**



Indoor Lampless Buckeye Brooder.



Buckeye No. 1 Indoor, 2 Compartment, Indoor Self-Regulating Brooder.

Should be used indoors. The wire guard can be removed and the floor dropped down after chicks are a few days old.



## COAL-BURNING COLONY HOVERS

This style and method of hovering chicks in large numbers is a success. The Coal-Burning Hover is the modern, sanitary, efficient and convenient way of brooding chicks in large numbers. The saving of labor and time, cost of equipment and operation is less than one-half as compared to old methods.

To get the best results with the least expense, these hovers should be placed in the center of a tight-walled room that will hold the heat, and without too much ventilation at the top. An ideal size for the brooder room is about 8x10 or 10x12 feet, but in addition to this, you should have another room or a covered feeding and scratching pen adjoining that is only moderately warm.

Chicks that are forced to eat, exercise and sleep all in one warm room will not be as healthy and vigorous or grow as fast. The feeding and scratching pen need not be so very large, but it should be divided from the hover room, with an opening at the bottom of the partition, which should be closed at night.

The sheet metal canopy gives sufficient heat to remove the chill and divide the room into zones of various temperatures, growing cooler from the stove toward the wall, thus giving the chicks a wide range of temperature, and instinct leads them to seek the temperature best suited to their individual needs.

Because chicks are not confined to small space with foul air, they grow faster and feather out quicker under these Hovers. The chicks spread out around the room with perfect content, and without crowding or huddling—each seeking and finding the particular amount of warmth it requires; the weakling more heat, the normal chick less.

These stoves are equipped with an automatic regulator that opens or closes a damper in the stove, thus regulating the amount of fire and heat. The regulator permits the farmer or poultry-man to go about his other work with full confidence that the chicks will be better cared for than if they were constantly watched without the regulator, or than if they were cared for by the mother hen.

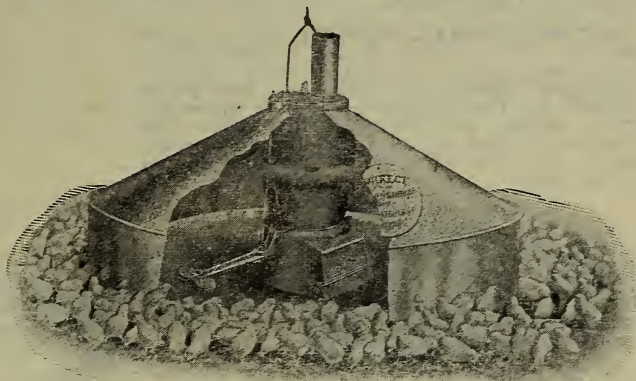
Sheridan, Ore., Nov. 1, 1916.

Routledge Seed & Floral Co.  
Portland, Ore.

Dear Sirs: The Colony Brooder that I purchased from you last spring was entirely satisfactory. The fuel consumption was exceedingly low and held an even temperature at all times. I was forced to use soft coal throughout the entire brooding season and can readily recommend the brooder to anyone.

Very truly

R. I. MERRIFIELD.



Correct Coal Burning Colony Hover.

**FUEL.**—Of course, hard coal will give the best results, because it is cleaner, but if it is not to be had, use the best grade of soft coal (nut size) you can get and results will be satisfactory, although you will have to clean the flue oftener. We have reports on file from customers who got perfect results last year with soft coal.

These new Coal-Burning Colony Hovers are absolutely Guaranteed to Give Satisfaction or Money Refunded. Large descriptive folder, giving full information on request.

### PRICES FOR 1917

#### CORRECT COAL BURNING HOVER NO. 2.

51-inch canopy; 100 to 1500 chick capacity; F. O. B. Portland, \$18.00. Extra—3-inch pipe, 2 feet lengths, 25c; elbows, 30c

#### BUCKEYE STANDARD COAL BURNING

HOVER.—52-inch canopy (no curtain), 100 to 1000 chick capacity; F. O. B. Portland, \$19.50.

**NOTE.**—The Buckeye Incubator Company and the Correct Hatcher Company at the present time, December 1, 1916, are mixed up in a lawsuit over patent rights, infringements, etc. Both parties claim they will win. However, that does not affect the successful operation of these Brooder Stoves, and we offer both makes—aside from the name they are alike as "two twins," except that the Buckeye has no canopy curtain.

## Kresky's "Pride of Petaluma" Oil-Burning Brooder Stove

If you want a perfectly reliable, economical and satisfactory oil-burning colony hover, buy the Kresky. It will pay every poultry raiser to investigate this. This new-style, fresh-air Kresky was first brought to our attention last fall by a prominent local poultry raiser, who tried it out with the greatest success, and we have already booked many orders. If interested, send for descriptive catalog of Kresky's Brooder Stove. We are sure you will be benefited by Kresky's methods and ideas.

No. 12-A Brooder Stove, 500 to 1500 capacity, \$34.00, prepaid

No. 15-A Brooder Stove, 300 to 500 capacity, \$28.00, prepaid



Kresky Oil Burner



## International Sanitary Hover

A successful, economical brooding device. Note the illustrations showing parts and general construction, the simplicity and perfection. We highly recommend it. Many imitations have been made, but they all lack the perfectness of this one. Baby chicks will leave any other hover to go under this one; they "take to it" like "sweet sixteen to candy." We know from actual experience.

**INTERNATIONAL HOVERS** are as practical for the small backyard poultry raiser as for large poultry plants. They are usable anywhere, ready for business wherever placed. All that is necessary is to place the Hover where you want it and light the lamp, no cutting of holes or building of platforms; no kneeling in mud and dust to get at the lamp.

### Special Feature.

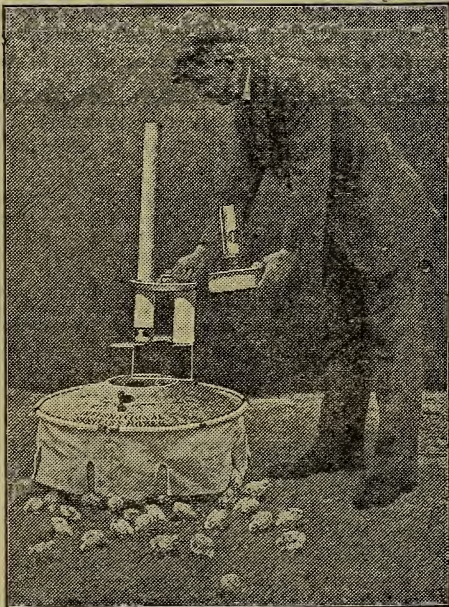
**IT IS THE WARMEST NEAR THE CURTAIN.**—This causes chicks to distribute themselves around the edge of the curtain, where they have plenty of room and fresh air as well as warmth. No deaths by crowding of the chicks to the center.

**IT IS ESPECIALLY SUITABLE** for use in colony or brooder houses; but it can be used with equally good results in a hen house, tent, barn, stable, piano box, or even a dry goods box. It can be picked up and carried around with ease.

Gases and fumes cannot get under the hover.

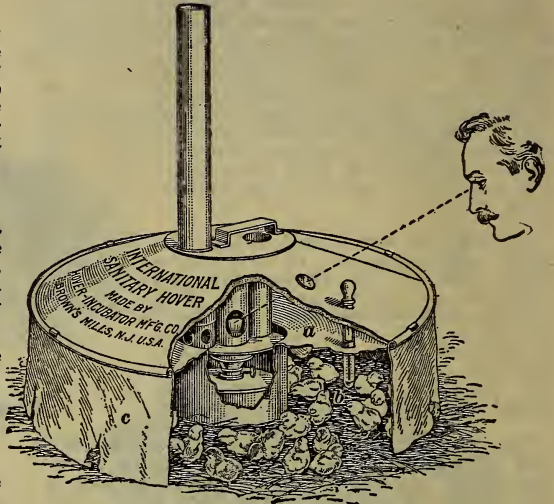
This hover is constructed of heavy galvanized iron and is sanitary, vermin and fire-proof. Will last a life time, and give perfect brooding service every day of that time. It is only necessary to lift the thermometer to ascertain the temperature under the hover.

The air is kept wholesome by diffusion through the cloth curtain. There are no drafts under the hover. It hovers 100 chicks and has enough ventilation for 2400 (weight 33 lbs.).



To get at the lamp, just lift it out. To move the hover, just pick it up. To set up the hover, just set it down.

**DON'T WAIT UNTIL YOUR CHICKS HATCH TO ORDER YOUR BROODER OR HOVER.**



**BEST BY TEST.**—Many tell us that they raise 94, 96, 98 and some even 100 per cent of the baby chicks put under this hover. It has many advantages that the old hen does not have, always warm and ready to "brood" the chicks; "no lice or big feet."

**PORTLAND PRICE, COMPLETE, \$10.00 ea.**

## Reports

The Sanitary Hover raises more chicks and less trouble than any other hover on earth. Read the following:

Molalla, Ore., Oct. 22, 1916.

Routledge Seed & Floral Co.

Dear Sir: In reply to yours of the 12th in regard to the International Sanitary Hovers, would say that I tested them thoroughly and I find them almost perfect; the only improvement on them would be a cluck like a hen and then they would be perfect. I bought 600 baby chicks and raise 95 per cent, that was about 45 per cent better than my neighbors done with other kind of brooders.

Yours truly,

B. F. NOYER.

Jennings Lodge, Ore., Oct. 15, 1916.

Mr. Routledge,  
Portland, Ore.

Dear Sir: In regard to the International Sanitary Hover we bought from you last fall I will say that it proved very satisfactory to us—and also we will recommend it to anyone interested in that line.

Hoping this will benefit your future customers,

Very truly yours,

MRS. J. W. JOHNSTON.

Brush Prairie, Wn., Oct. 19, 1916.

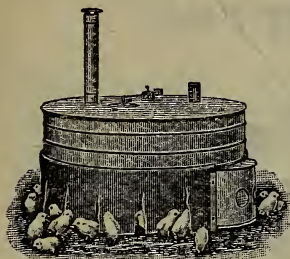
Routledge Seed & Floral Co.

Gentlemen: In reference to the International Sanitary Hover I wish to say that it has given ideal results, and if I should need another Hover it would surely be a Sanitary.

Yours truly,

J. SKOGLUND.





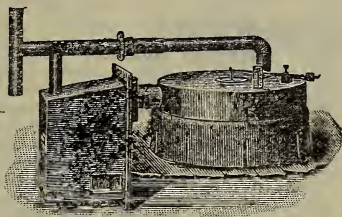
## Cypher's Portable Hover

The Cypher's Portable Hover is self-regulating and self-ventilating and one of the best brooding devices of the kind on the market. As it is equipped with the same high-grade thermostat as the Cypher's Incubators and the Cypher's Adaptable Hover, it maintains a steady and uniform heat. It is positively and infallibly automatic in ventilation, preventing the trapping of "dead" air or poisonous gases underneath the curtain. A continuous supply of fresh, warmed air is automatically forced beneath the hover.

This Portable Hover is very convenient for cleaning and moving. Rated capacity, 75 newly hatched chicks, or 50 chicks that are ten days to six weeks old. Price \$11.00.

## Cypher's Adaptable Hover

This hover is used in all Standard Cypher's Brooders, but is also complete in itself and is intended to be used separately in brooding houses, colony coops, portable houses and in home-made brood coops. Is self-regulating, self-ventilating and bears the Underwriters' Inspected Brooder Label. Capacity, 75 newly hatched chicks. Price \$11.00.



## Standard Cypher's Brooders

The Standard Cypher's Brooders are fire-proofed and insurable, and are the most durable, convenient and efficient brooders thus far invented. They are equipped with Cypher's Adaptable Hover, which is Self-ventilating and Self-regulating—you can therefore depend upon an even, steady temperature in the hover, and a lively, thrifty, growing lot of chicks.

### STYLE B OUTDOOR BROODER.

The best "Foster Mother" made and sold at any price and thousands are in use. (See cut.)

**Dimensions.**—Floor space, 32x62 inches; height, 32 inches in front, 24 inches in rear. Capacity (normal), one hundred newly-hatched chicks; can accommodate one hundred and fifty chicks. Price \$17.50.

### STYLE "A" OUTDOOR BROODER.

One of the best sellers on account of the lower price. Same size, design and construction as the first section (left end half) of Style "B." Anyone who is handy with tools can build and join on another apartment for a "feeding and exercising room" to be used when the weather is bad. Capacity, 100 baby chicks. Price, \$14.50.

### STYLE "D" INDOOR BROODER.

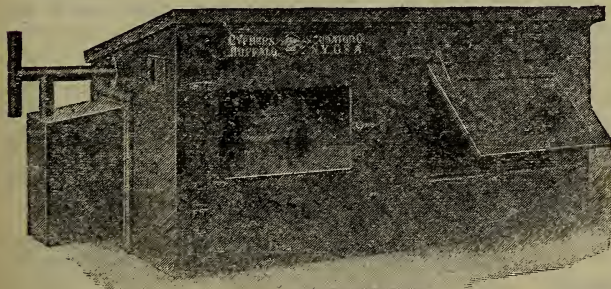
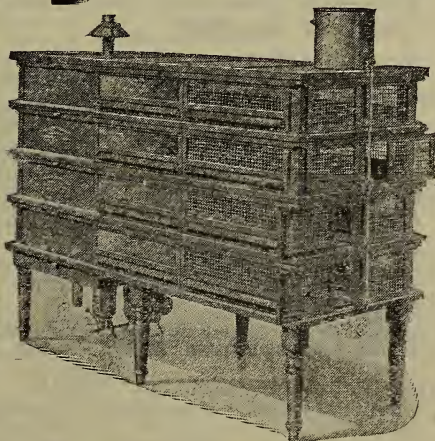
This is the same in all respects as the Style A outdoor type, except that the upper half is more convenient in shape and construction for indoor use. Size, about 3 ft. square. Can be used anywhere, just so it is under a roof. Price, \$12.50.

## The Paradise Brooder

The best indoor brooding device for newly hatched chicks and ducklings. Complete brooder has four sections, each section holding two separate flocks of 50 chicks. Total capacity 400 chicks. Means for feeding and caring for chicks are very convenient and chicks are always under control of the operator. One large oil heater provides warmth. Chicks have proper heat, light, ventilation, fresh water and room for exercise. (See illustration.)

For those who wish to raise chicks and only have limited space and little time this is the ideal method. This brooder can be kept in a spare room in the house. It can easily be kept sanitary and clean. The chicks are up off the floor and everything can be seen at a glance.

Price, Base Section, \$26.00. Additional \$17.00.



Cypher's Style "B" Three Compartment  
1916 Outdoor Brooder.

Four Section Paradise Brooder.

CYPHER'S CATALOG FOR 1917 contains fully illustrated descriptions of these self-regulating, fire-proof hovers, also of the entire line of Cypher's apartment brooders, etc., etc. Free on request.



## Routledge's "Highest Quality" Poultry Foods

At special prices direct to Poultry Raisers: 5 bags assorted foods at 500-lb. prices. Prices subject to important market changes. Write for quantity price when ready to buy.

The planter who buys high grade seed gets better crops. He who fertilizes his soil—manures it well—is amply repaid in the size of his harvest. The poultryman who feeds the Highest Quality poultry foods, makes more profit than he who is content with ordinary stock, although his feed costs a lot more.



### BEEF SCRAPS

Our "Highest Quality" beef scraps are rich in materials which make bone, muscle and lean meat. They insure health, thrift and vigor, and satisfy the natural craving of the bird's system for flesh-food in some form. Rich in protein. Can be fed dry or with cooked rations. Don't waste any, feed in one section of your Sanitary Shell and Grit Box. See pages 130-131.

Price, 5 lbs. 30c; 10 lbs. 50c; 50 lbs. \$2.25; 100 lbs. \$4.00; 500 lbs. @ \$3.85.

### GRANULATED BONE—"SPECIAL"

We offer only highest quality, white, pure and clean. Rich in phosphates, lime and protein. Should be kept before your chickens at all times. Feed in a Sanitary Shell and Grit Box.

Price, 6 lbs. 25c; 14 lbs. 50c; 100 lbs. \$3.00; 500 lbs. @ \$2.75.

### POULTRY PEPPER

A good tonic and invigorator. Ground.

Price, 1 lb. 25c; 5 lbs. \$1.00

### POULTRY MUSTARD

Ground fine. 1 lb. 20c; 6 lbs. \$1.00

### EEL FISH MEAL

Very rich in egg forming protein. A local production of merit that is taking the place of the rank smelling fish meal that has been offered heretofore.

Prices, 5 lb., 25c; 50 lbs. \$2.00; 100 lbs. \$3.75; 500 lbs. at \$3.65.

### CONKEY'S BUTTERMILK STARTING FOOD

Buttermilk your baby chicks and make them grow like weeds.

Put vim and vigor into them when they most need it; help them throw off disease and withstand exposure.

Conkey's Buttermilk Starting Food provides buttermilk for the chicks in a dry, sanitary mash form. It makes a regular, uniform supply possible, and in addition to this it contains sweet, pure grains and just enough medication to start the organs working in a normal way. It is a nourishing, stamina-building food that makes the youngsters husky and strong. It should be their very first food. (Send 3c for sample.)

Prices, 1 lb., 10c; 3 lbs., 25c; 6½ lbs., 50c; 14 lbs., \$1.00; 25 lbs., \$1.65; 100 lbs., \$5.75.

### SPRATT'S PHEASANT FOOD

This is prepared especially for pheasants but is equally as good for turkeys and chickens. This food takes the place of what the pheasants would get in the wild state. It promotes health, strength and vigor. A cooked food that is baked and

reground into 3 sizes: No. 12, pinhead size for baby chicks; No. 5, for chicks over 3 weeks, and No. 3, (grain size) for adult birds.

Prices, 1 lb., 10c; 5 lbs. 40c; 10 lbs., 75c; 50 lbs., \$3.50; 100 lbs., write.

**PHEASANT BREEDERS** should have a copy of **Spratt's Pheasant Culture** 25c postpaid. Your name will be put on Spratt's mailing list for free booklets and bulletins if you request it.

### CONKEY'S LAYING TONIC (Poultry Tonic)

It insures health, vigor and the maximum egg production both summer and winter. Guaranteed to please you or money back. A teaspoonful a day to 15 hens. Prices (not prepaid): 2 lbs. 25c; 4 lbs. 50c; 8 lbs. \$1.00.

**NOTE**—Add postage if wanted by mail. Weights given are wrapped.

### POULTRY SHELLS, CRUSHED

These should be within reach of your hens at all times. Not straight Oyster Shells, but a combination of Oyster, Sea and Clam Shells that is rich in lime material for egg shells. Gives good results and is much cheaper. Put in one section of your Sanitary Feeder. See pages 130-131.

Price, 5 lbs. 10c; 14 lbs. 25c; 100 lbs. 90c; 500 lbs. 80c.

### OYSTER SHELL, CRUSHED

This is pure hard oyster shell crushed and sifted, preferred by some to our Poultry Shell.

Price, 5 lbs. 10c; 12 lbs. 25c; 100 lbs. \$1.25; 500 lbs. @ \$1.10.

### GRIT—Best Grade

Every poultry raiser should keep a supply of this grit in each pen. **Baby chicks and ducklings must have it.** Made in three sizes chick, pigeon or broiler and hen size. We always send hen size unless otherwise ordered.

Price, 5 lbs. 10c; 14 lbs. 25c; 100 lbs. \$1.00; 500 lbs. at 90c.

### CLOVER OR ALFALFA MEAL

The best substitute for green food for winter feeding; helps keep the egg basket full; mixed with the soft feed is good for large or small chicks; endorsed by leading experts.

Price, 1 lb. 10c; 10 lbs. 50c; 100 lbs. \$1.50

### CHARCOAL

Our Granulated Charcoal is prepared especially for poultry; no dust; a good thing for bowel trouble, sour crop and indigestion; a health preserver. State size wanted **A** for mash, **B** for chicks, **C** for large chickens or hens.

Price, 1 lb. 10c; 3 lbs. 25c; 10 lbs. 75c; 50 lbs. \$2.00; 100 lbs. \$3.75.

**IMPORTANT NOTICE TO POULTRY KEEPER.**—We want your trade direct—not the dealer's therefor give you strictly wholesale prices in 5, 10 and 20-bag lots.

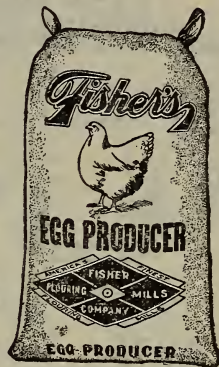


## Fisher's Pure Foods For Poultry



We have made arrangements with the Fisher Flouring Mills Co. to handle their complete line of Poultry Foods. We are now in a position to quote very low prices and supply promptly in any quantity these pure high grade foods. A trial will convince you of their superiority over the much advertised "local brands."

We make special prices direct to Poultry Raisers: 5 bags assorted foods at 500-lb. prices. Prices subject TO IMPORTANT MARKET CHANGES. Write for quantity price when ready to buy. We'll save you money.



### FISHER'S CHICK STARTER

Feed nothing for the first 36 hours after hatching—then start the babies right with this perfect, finely cut food which contains the food ingredients necessary to promote quick, rugged growth.

Prices, 5 lbs. 25c; 11 lbs. 50c; 50 lbs. \$1.85; 100 lbs. \$3.50; 500 lbs. @ \$3.25.

### FISHER'S CHICK FOOD

This is a preparation of steel cut, pure, wholesome grains, carefully and scientifically combined. A month or two on this diet will bring remarkable results in the rounding out of the body and the development of a superb coat of feathers. Every element that goes into Fisher's Chick Food counts heavily in the building of the fowl. There is no waste.

Prices, 5 lbs. 25c; 12 lbs. 50c; 100 lbs. \$3.50; 500 lbs. @ \$3.25; 1000 lbs. @ \$3.15.

### FISHER'S DEVELOPING MASH

There is no better known food ration for growing strong, sturdy and active chicks quickly, either for layers or for the show pen. It is a bone, tissue and feather producing ration of known merit. It should be fed after chicks are six or seven days old and kept continually before them until they are fully matured. (Feed it in a dry food hopper.)

Prices, 5 lbs. 25c; 12 lbs. 50c; 100 lbs. \$3.00; 500 lbs. @ \$2.75; 1000 lbs. @ \$2.65.

### FISHER'S GROWING FOOD

This meets the wants of the growing chicks from the time they are five or six weeks of age until large enough to market and contains the nutritive elements neces-

sary for the rapid building of tissue and when fed in conjunction with Fisher's Developing Mash will bring about the quickest possible development.

Prices, 5 lbs. 25c; 12 lbs. 50c; 100 lbs. \$3.50; 500 lbs. @ \$3.25; 1000 lbs. @ \$3.15.

### FISHER'S SCRATCH FOOD

This is a perfectly balanced ration which, when fed with Fisher's Egg Producer for laying hens or Fisher's Developing Mash for maturing youngsters, contains all the food elements required to obtain the very best results known to scientific poultrymen. In its preparation only the purest and choicest grains are used. Experienced Poultry recognize it as the best scratch food the market supplies.

Prices, 5 lbs. 25c; 12 lbs. 50c; 100 lbs. \$3.00; 500 lbs. @ \$2.75; ton \$54.00.

### FISHER'S EGG PRODUCER

A mash mixture containing all the ingredients necessary to the matured laying hen; very rich in protein. It renders unnecessary the feeding of blood meal, beef scraps, etc. The rapidly increasing demand for Fisher's Egg Producer proves its real money making value. Results will prove this the most economical mash on the market.

Price, 5 lbs. 25c; 12 lbs. 50c; 100 lbs. \$2.75; 500 lbs. @ \$2.50; 1000 lbs. @ \$2.45.

### FISHER'S EGG GRAIN

While this is not equal to Fisher's Scratch Food we believe it is as good as most other Scratch Foods on the market. For general use it will give good results.

Price, 5 lbs. 25c; 10 lbs. 35c; 100 lbs. \$2.75; 500 lbs. @ \$2.65; ton \$52.00.

## Cypher's Chick and Poultry Food

Following prices based on January 1st grain market and subject to all changes. **WRITE FOR SPECIAL PRICES WHEN READY TO BUY.** Sold in original sealed bags.

**CYPHERS' CHICK FOOD.**—A complete, scientifically compounded food for young chicks. Price, 100-lb. sacks \$3.60.

**CYPHERS' DEVELOPING FOOD.**—A special dry grain mixture intended for properly matured chicks after they are 8 to 10 weeks old. Price, 100-lb. sacks, \$3.50.

**CYPHERS' GROWING MASH.**—We recommend the use of Growing Mash in connection with Developing Food until the chicks are three months old. Price, 100 lb. sacks, \$3.35.

**CYPHERS' FATTENING MASH.**—Specially designed to promote rapid formation of firm, tender flesh. Price, 100-lb. sacks, \$3.25.

**CYPHERS' LAYING MASH.**—This is not in any sense a condiment or an egg stimulant. On the contrary, it is strictly A FOOD—a palatable, highly nutritious, balanced egg ration, ready mixed for the daily mash. Price, 100-lb. sacks, \$3.25.

**CYPHERS' FERTILE EGG MASH.**—This food has for its special object the production of well-fertilized eggs in large numbers. Feed once a day. Price, 100-lb. sacks, \$3.10.

**CYPHERS' PIGEON FOOD.**—In compounding a food for pigeons the proper selection, age and condition of the various grains is of great importance. This food is prepared by experts and will give the best of results. Price, 5 lbs. 25c; 12 lbs. 50c; 100 lbs. \$3.60.

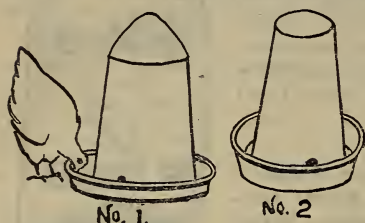
**CYPHERS' SALT CAT (for Pigeons).**—It aids digestion, invigorates the system and promotes good health. It is put up in brick form, which keeps the birds busy picking at it, and prevents waste. Crumble the salt cat for young birds. Price, per brick, 25c; doz. \$2.50. Mailing weight 1½ lbs. each.

Save Feed, Time and Money by using Sanitary Feeding and Watering Devices offered on pages 130-134.



## Up-to-Date Sanitary Drinking Fountains and Feeders

Increase your profits by saving the chicks. Start now by ordering sanitary, economical, up-to-date Fountains and Feeders.



No. 1.

No. 2

Note.—When wanted by parcel post add postage at weight given. See page 1 for rate table.

### NO. 1. CONE TOP FOUNTAINS

Most desirable, new style, pressed, galvanized. On account of "cone shaped top" (see cut) birds cannot roost on them.

| Capacity | P. P. Wt. | Each | Doz.   |
|----------|-----------|------|--------|
| 1 qt.    | 1 lb.     | 25c  | \$2.50 |
| 2 qt.    | 1½ lb.    | 35c  | 3.50   |
| 4 qt.    | 2 lb.     | 45c  | 4.50   |

### NO. 2. CYPHER'S DRINKING FOUNTAINS

Pressed out of heavy galvanized iron; will last for years. Easy to clean inside and out. (See cut.)

| Capacity | P. P. Wt. | Each | Doz.   |
|----------|-----------|------|--------|
| 1 qt.    | 1 lb.     | 25c  | \$2.50 |
| 2 qt.    | 1½ lb.    | 35c  | 3.50   |
| 3 qt.    | 2 lb.     | 40c  | 4.00   |

### NO. 3. SANITARY STONE FOUNTAINS

An old and popular style that keeps the water cool; see cut. (Not mailable.) Price, 1 qt. 25c, 2 qt. 35c, 4 qt. 50c, 8 qt. 90c.



No. 3



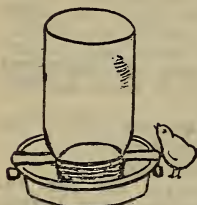
No. 4

### NO. 4. STAR JAR FOUNTAIN

Very desirable style—chicks can't get wet. Any Mason jar fits it. Price (without jars), each 20c; doz. \$2.25, prepaid.

### NO. 5. PERFECTION FOUNTAIN

This consists of a shallow 6-inch pan and a collar to fit any size Mason jar. You fill the jar, screw on the collar, slip the pan in and turn it over. Simple, sanitary and perfect for small chicks. The best in this style. Price (without jar) 20c each, \$2.25 per doz., prepaid.



No. 5.



No. 6

### NO. 6. "ALL-RITE" FOUNTAIN-FEEDER

(See cut.) Hangs up out of the litter. It feeds water, mixed chick feed, etc. It is easy to fill; simply snap out the pan, fill the jar, slip the pan in again and invert; no need of removing the jar from the wire holder. Made to hold the old zinc-top Mason pint, quart or two-quart jar. Use small jars for baby chicks, large for adults. Price (without jars), each 15c; doz. \$1.50 postpaid.



No. 7



No. 8

### WALL FOUNTAINS

Very desirable for adult fowls; hang up on the wall out of litter and dirt; made of heavy galvanized iron.

No. 7. Cypher's Style. Price, each, 1 gal. (P. P. 3 lbs.) 50c; 2 gal. (P. P. 3½ lbs.) 75c.

No. 8. Moes Style. Opening pressed in. ½ gal. (P. P. 2 lbs.) 40c each; 1 gal. (P. P. 3 lbs.) 50c; 2 gal. (P. P. 3½ lbs.) 75c.

### GALVANIZED FEEDERS

For Shell-Grit, Sea-Pro-Co, Dry Mash, Charcoal, Beef Scraps, Etc.

Made of galvanized iron; soon pay for themselves in preventing waste. Sanitary, closed top self feeders for granulated bone, beef scraps, grit, shells, charcoal, dry mash, etc. If these necessary foods are kept before your fowls they will eat just what their systems require for profitable results; in other words, properly balance their rations. (See cut.) Should be hung up out of the litter.

NO. 10. CYPHERS.—Three compartments holding 2 qts. each (P. P. 3½ lbs.) Each 60c; doz. \$6.00

NO. 10. NATIONAL.—Same style, little smaller; three compartments, 3 pts. each (P. P. 3 lbs.) Each 50c; doz. \$5.00

NO. 11. MOE'S.—Extra strong and well made; the feed trough at bottom is round: 4 section, 2 qts. each (P. P. 5 lbs.) Each 85c; doz. \$8.50. 3 section, 2 qts. each (P. P. 4 lbs.) Each 60c; doz. \$6.00.

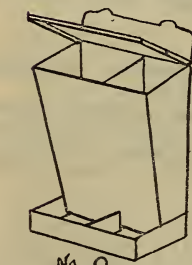
NO. 9. Large—two compartments, one 6 qt. and one 3 qt. (P. P. 4 lbs.), each 75c. Small—two compartments, 2 and 4 qts (P. P. 3 lbs.) each 50c.

### NO. 12. MOE'S CHICK SERVER

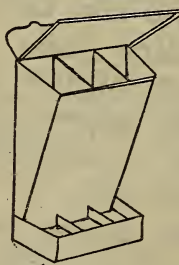
Practical and a great saver of feed. Chicks can not get into it. For water or feed. Small (P. P. weight 2 lbs.) each 25c; large (P. P. weight 3 lbs.) each 35c

### FOOD AND WATER CUPS

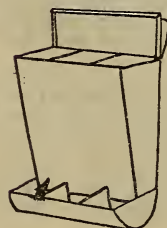
Made of galvanized iron, strong and durable; wire hangers; hold half pint. For exhibition or shipping coops. Each 15c; doz. \$1.50 (P. P. doz. 4 lbs.)



No. 9



No. 10



No. 11



Open



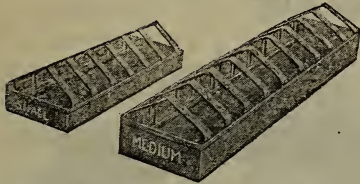
No. 12

NOTE.—Above prices subject to change if metal continues to advance.



## FOOD AND WATER HOLDERS

**For Poultry and Ducks of All Ages.**—They are especially recommended for use in feeding mashies of any kind; steamed or dry alfalfa or sprouted grain. This protected receptacle saves 15 to 25 per cent in food-stuff. The guard lifts out of the pan, making them easy to clean. There is nothing to get out of order. Made of heavy galvanized iron; safe, sanitary, saving and serviceable.

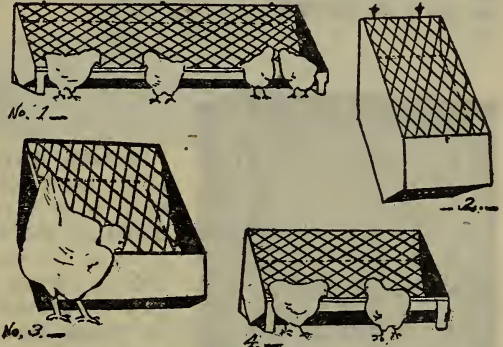


Food and Water Holders.

|              | Size     | P. P. Wt.  | Price    |
|--------------|----------|------------|----------|
| Small .....  | 4x10 in. | 1 1/4 lbs. | 40c each |
| Medium ..... | 5x18 in. | 2 1/4 lbs. | 60c each |
| Large .....  | 6x24 in. | 3 1/2 lbs. | 85c each |

## BOSTON DRY FOOD HOPPERS

We believe this Food Hopper to be the best device of the kind on sale for the use of thrifty, up-to-date poultry raisers. With this device fowls cannot waste food, yet food is always accessible and always in sight. It cannot clog, is easily refilled when empty, and easy to clean and keep clean. During the day the front screen is dropped down against the feed, at night lifted up and hooked to keep the rats out. (See cut.) Insures your chickens clean food entirely free from filth of any kind. Every poultryman will appreciate this feeder. Made of heavy galvanized iron; with care will last forever.



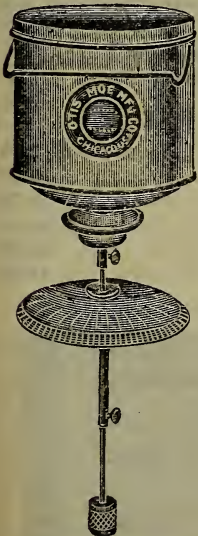
Boston Food Hoppers.

|              | Capacity | Size       | P. P. Wt. | Each   |
|--------------|----------|------------|-----------|--------|
| No. 3 Large  | 1/2 Bu.  | 17x8x13    | 7 lbs.    | \$1.00 |
| No. 2 Medium | 1 Pk.    | 17x8x7     | 6 lbs.    | .80    |
| No. 4 Short  | 1/2 Pk.  | 15x8x4 1/2 | 4 lbs.    | .90    |
| No. 1 Long   | 1 Pk.    | 29x8x4 1/2 | 5 lbs.    | 1.35   |

## FOOD AND WATER CUPS

Made of galvanized iron, strong and durable; wire hangers; hold half pint. For exhibition of shipping coops. (See cut.)

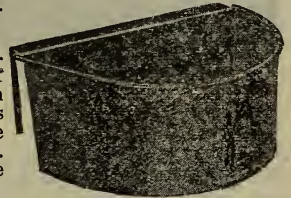
Each 15c; doz. \$1.50 (P. P. wgt. doz. 4 lbs.)



## "KANT KLOG" FEEDER AND EXERCISER

One of the best combined feeders and exercisers, cannot clog. No spring to get out of order. Swinging deflector scatters the grain all around, a little at a time, when ever the birds pick at the grain bait cup. Holds enough to be of real service. Can be set to feed little or much. Hang in the scratching pen with straw on the floor.

No. 29. Capacity 10 qts., each.....\$2.50  
No. 31. 6 qts., for low houses, each..... 1.75



## "6 IN 1" EXERCISER AND FEEDER

Just what its name implies. It is a large hopper supported on four strong iron legs and devised to hold all the different food necessary for poultry. The center hopper holds the Scratch Food or straight grain, and is so constructed that a little agitator, which contains whole corn as a bait, will be worked by the fowls so that it will scatter broadcast a small amount each time, of the dry grain in the hopper. If straw is on the floor it gives the birds the necessary exercise hunting for the grains, making it impossible to overfeed. Surrounding this center hopper are

"6 in 1."



Kant Klog.

are six compartments made to contain dry mash, beef scrap, grit, charcoal, oyster shells, etc. All are easily accessible, yet none can be wasted. Conical shape hopper cover preventing the fowls roosting on it. The "6 in 1" Exerciser Feeder has many advantages not found in exerciser feeders of other makes. It eliminates all other feeding devices. Price, 40 qt., \$3.50; 20 qt., \$2.75.

## MOE'S NEVER FAIL TRAP NEST

DELICATE TRIGGER HOLDING TRAP RELEASED BY HENS ENTRANCE FALLING SILENTLY



A solution of all trap nest troubles. Lice proof—only 1 bird can enter at a time. Trap door removable for ordinary nest.

TRIGGER LOCKS TRAP AND HEN THEN THERE TO STAY UNTIL RELEASED.



Made of galvanized iron, light, durable and as the name implies, it never fails. Every nest set up and ready for use when shipped.

No. 33. 12x12x12 in. (P. P. 6 lbs.).....\$1.00  
No. 34. 12x12x14 1/2 in. (P. P. 7 lbs.)..... 1.25

Equip your poultry houses and yards with these money-saving, sanitary utensils. Don't invite diseases and loss by using old pans, open dishes or wooden troughs. Add postage.



## OAT AND GRAIN SPROUTERS

The Perpetual Poultry Silo—grows green feed while you wait—makes two to four bushels of feed from one of grain—runs up the egg yield—cuts down the feed bill.

Remember, no other green food has the **WONDERFUL QUICKENING VIRTUE** of young, growing **OAT SPROUTS**.



### DOUBLE QUICK SPROUTER

HOW THE DOUBLE QUICK IS BUILT.

**Outside Cypress Wood Walls** insulated with asbestos and resin board for retaining heat. **Inside Metal Grain Chamber** of open hearth galvanized sheet steel that is non-destructive by moisture and minimizes mold troubles. **Lamp Heat and Fumes** pass up between the two walls and escape from openings near top, no fumes entering the grain chamber. **Every Unit of Heat** is thus utilized so that the cost is small. **The V-Shaped Vapor or Water Pan** is just above the lamp, so the first thing the lamp heat strikes is the bottom of this pan, producing the warm vapor that bathes the grain in moisture. **A Drain Tube** leads from the vapor pan down into the lamp box to take care of the surplus water when grain is watered. **Glass Doors** give abundance of light to stimulate growth. **Movable Top** permits water poured over top tray to percolate down through all trays. **A Perfect Ventilation System** produces in every part of the machine a positive movement of air, which means death to mold. **Best of Cypress**, the lumber that never rots, is used. **The Entire Machine** is made throughout of first class material. is finished in **natural wood colors**, and will last many years.

COMPLETE DESCRIPTIVE CIRCULAR ON REQUEST.

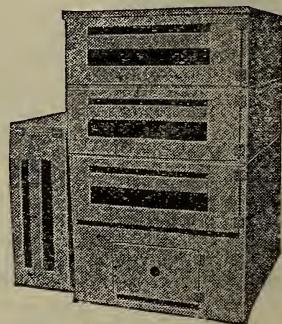
|        |          |           |          |        |           |          |            |         |
|--------|----------|-----------|----------|--------|-----------|----------|------------|---------|
| No. 1. | 1/4 bu., | 2 trays,  | 25-35    | hens,  | 18x14x23, | 35 lbs.  | Price..... | \$ 7.00 |
| No. 2. | 1/2 bu., | 4 trays,  | 50-75    | hens,  | 18x14x30, | 45 lbs.  | Price..... | 10.00   |
| No. 3. | 1 bu.,   | 5 trays,  | 100-150  | hens,  | 21x17x40, | 70 lbs.  | Price..... | 14.00   |
| No. 4. | 2 bu.,   | 6 trays,  | 200-300  | hens,  | 25x20x44, | 95 lbs.  | Price..... | 18.75   |
| No. 5. | 4 bu.,   | 12 trays, | 400-600  | hefns, | 39x25x45, | 150 lbs. | Price..... | 25.75   |
| No. 6. | 8 bu.,   | 16 trays, | 800-1200 | hens,  | 52x27x60, | 250 lbs. | Price..... | 41.00   |

Furnished with lamp, thermometer, directions, etc.

### COLFAX METAL SPROUTERS

INVENTED BY THE ORIGINATOR OF THE DOUBLE QUICK.

**Built in Sections**—buy what you need now and add sections as your flock grows. **Stove Pipe Fit**—Sections fit on bases and each other by the telescope or stove pipe method which prevents leakage of heat outside and smoke into grain chamber at joints, as is the case where sections simply rest on bases or other sections. **Telescope or Stove Pipe Fit** prevents sections being put out of alignment by pulling out or pushing in trays. **This feature is very important.** You Can Fasten sections on permanently, if desired, which makes as solid a sprouter as if made all in one piece.



Prices, Size and Capacity Colfax Sectional Metal Sprouter.

|                |           |          |          |         |       |                |            |         |
|----------------|-----------|----------|----------|---------|-------|----------------|------------|---------|
| Small Base,    | 13x16x20, | 2 trays, | 1/4 bu., | 25-35   | hens, | weight 25 lbs. | Price..... | \$ 9.50 |
| Small Section, | 13x16x10, | 2 trays, | 1/4 bu., | 25-35   | hens, | weight 12 lbs. | Price..... | 3.00    |
| Large Base,    | 26x26x22, | 2 trays, | 1 bu.,   | 100-150 | hens, | weight 50 lbs. | Price..... | 16.00   |
| Large Section, | 26x26x10, | 2 trays, | 1 bu.,   | 100-150 | hens, | weight 33 lbs. | Price..... | 5.75    |

Furnished with lamp, thermometer, directions.

Capacities of Double Quick and Colfax.

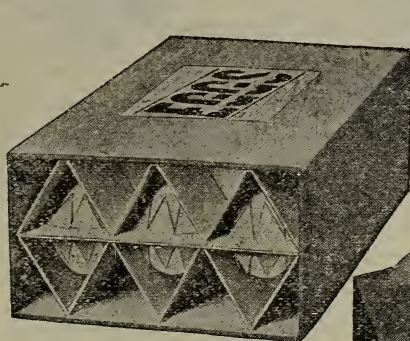
The capacities are based on dry grain. We rate one bushel (dry grain measure, sprouted 4 days) to every 100 hens for egg production, or 150 hens if fed only what is needed to keep in good health. If allowed to grow six or eight days feed less as more food is produced.



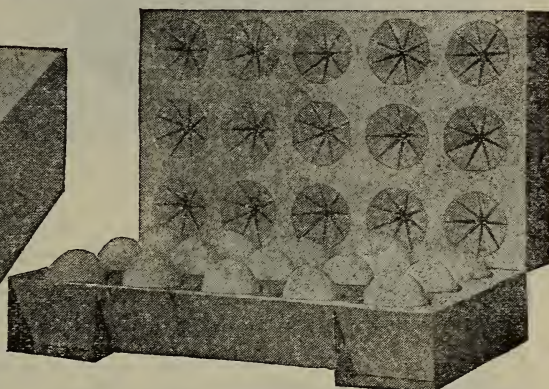
## Egg Boxes for Commercial and Hatching Eggs

**POSTAGE.**—In ordering above egg boxes by mail or P. P., be sure you add extra money for postage. **RATE TABLE PAGE 3.** P. P. stands for parcel post, not **PREPAID.**

**NEW  
STYLE,  
DIAMOND  
CUSHION  
FRAME,  
LIGHT,  
STRONG,  
AND  
SAFE**



OPEN END SHOWING CONSTRUCTION.



### DIAMOND EGG BOXES

The Diamond Egg Carrier is something entirely new and in a class by itself. We ship it to you in the flat, thereby saving on freight or express.

The Diamond "V-shaped" fillers hold the egg in suspension and protect them from breakage. No other box has this feature.

If properly packed, the Diamond Egg Carrier can be dropped a distance of six feet and not harm the eggs. No other light egg box made will stand this test. Packed flat, one dozen to a package, and containing address labels, gum paper and tissue paper.

#### DIAMOND EGG BOX FOR "HATCHING EGGS."

| Size         | Doz. Wgt. | Each | Doz.   |
|--------------|-----------|------|--------|
| 30 egg       | 21 lb.    | 30c  | \$3.60 |
| 25 egg       | 19 lb.    | 30c  | 3.00   |
| 9 egg Turkey | 10 lb.    | 20c  | 2.00   |
| 9 egg Goose  | 14 lb.    | 20c  | 2.00   |
| 12 egg Duck  | 12 lb.    | 20c  | 2.00   |

**15-Egg**—None in stock January 1. May be able to supply later. Write. For 100-egg size use four 25-egg size.

#### DIAMOND PARCEL POST EGG BOX.

Practical and **SAFE**, designed especially for sending eggs by Parcel Post to your customers who can empty the cases and return to be filled again.

| Capacity.    | Each Empty           | Weight Filled        | Each | Price Doz. |
|--------------|----------------------|----------------------|------|------------|
| 1 doz. S. C. | $\frac{3}{4}$ lbs.   | 2 $\frac{1}{4}$ lbs. | 15c  | \$1.00     |
| 2 doz. D. C. | 1 $\frac{1}{2}$ lbs. | 4 $\frac{1}{2}$ lbs. | 25c  | 2.00       |
| 3 doz. D. C. | 2 lbs.               | 6 $\frac{1}{2}$ lbs. | 30c  | 3.00       |
| 4 doz. D. C. | 2 $\frac{3}{4}$ lbs. | 8 $\frac{3}{4}$ lbs. | 40c  | 4.00       |

### IDEAL EGG BOX

Hold 12 eggs; very handy and convenient for private trade. Saves eggs and counting.

**Price**—Per doz. 20c (P. P. 1 $\frac{1}{4}$  lbs.); 100 for \$1.00 (P. P. 11 lbs.); 1000, \$9.00.

### BUCK PARCEL POST EGG CRATE

Very light, but strong; metal corners; holds 12 dozen eggs; wire bale wooden handle. (P. P. weight 6 lbs.) Each 65c.

**ABOUT PRICES.** On account of the big advance in prices of paper and cardboard of all kinds the past six months, it has been impossible to get prices on the above boxes from the manufacturers, good for any length of time, and above **PRICES ARE SUBJECT TO CHANGE.**

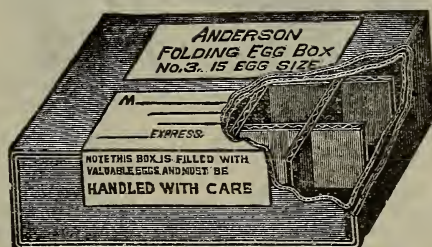
We have several broken lines of different makes of egg boxes on hand and can probably fill all orders promptly if you will allow us to substitute a little, if necessary. **PLEASE INSTRUCT WHEN YOU ORDER.**

### LIVE CHICK BOXES



Made from the best grade of corrugated card board. Shipped in the flat, but quickly set up by anyone. The use of this box has made long distance express shipments of live baby chicks possible and safe.

| Size      | Weight Empty               | Each | Doz.   |
|-----------|----------------------------|------|--------|
| 25 chick  | P. P. 1 $\frac{1}{4}$ lbs. | 20c  | \$2.25 |
| 50 chick  | P. P. 2 $\frac{1}{4}$ lbs. | 30c  | 3.00   |
| 100 chick | P. P. 3 lbs.               | 50c  | 5.00   |

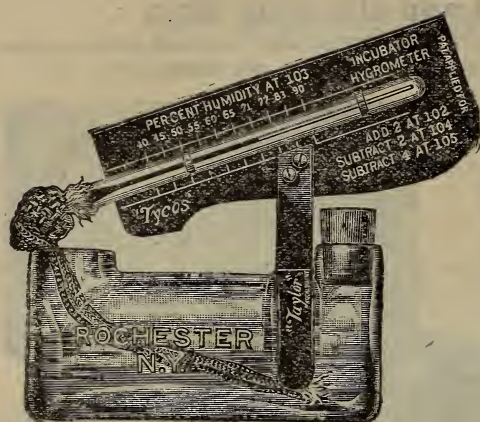


### ANDERSON EGG CARRIERS

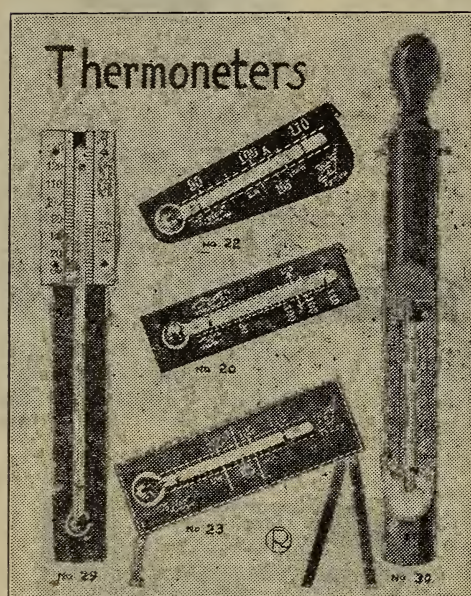
This has been a popular egg box for several years. A safe box for the expressing of fancy eggs, for hatching. Each egg should be wrapped before dropping into its place.

| Size         | Weight, Empty             | Each | Doz.   |
|--------------|---------------------------|------|--------|
| 15 egg       | 1 lb. each                | 20c  | \$1.75 |
| 30 egg       | 1 $\frac{1}{2}$ lbs. each | 30c  | 3.00   |
| 50 egg       | 2 $\frac{1}{4}$ lbs. each | 40c  | 4.50   |
| 100 egg      | 4 lbs. each               | 70c  | 7.00   |
| 24 egg P. P. |                           | 15c  | 1.50   |
| 36 egg P. P. |                           | 20c  | 2.00   |





Tyco's Hygrometer.



We sell the "Tyco's," recognized as the most dependable.

#### FOR INCUBATORS—

**No. 22 "Tyco's."**—Very popular. Generally suspended on string or wire on level with eggs. (Cypher's style.)

Postpaid 65c; wire hanger 10c extra

**Tyco's Certified.**—Same style as No. 22. Scale is etched on glass tube as well as metal back. "Certified correct," worth the price. Postpaid \$1.00

**No. 20.**—Tested, for incubators, used in Buckeye and other incubators. Postpaid 65c

**No. 22½.**—Similar to No. 20 with folding legs, adjustable; to be set up in egg tray. Postpaid 75c

#### FOR BROODERS—

**No. 29.**—New style and most convenient; temperature readable from above the hover. Used in both Cypher's and Buckeye Brooders. Postpaid, each 60c

**No. 30. Cypher's, for Hovers.** Price, 60c

**No. 30. International, for Hover, Price, 60c**

**NOTE.**—We keep in stock miscellaneous extra parts for Cypher's incubators and brooders. Ask for price list of stock wanted.

## INCUBATOR HYGROMETERS

### "Moisture Indicators"

Millions of chicks die in the shell every year, for the want of proper moisture conditions. The importance of a correct percentage of moisture during incubation has made the "Tyco's" Incubator Hygrometer as necessary as the "Tyco's" Incubator Thermometer. Neither takes the place of the other, but together they give the practical poultry raiser all the facts required for successfully regulating the heat and moisture of the incubator. Descriptive pamphlet on request.

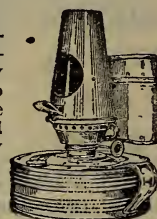
Hygrometer, with full instructions, postpaid \$1.50; with Tyro's 75c Incubator Thermometer, only \$2.00.

## LAMPS

### OAKS HYDRO SAFETY.—

Made especially for incubators and brooders. They have a water jacket to keep oil and burner cool and are perfectly safe, economical and satisfactory in every way.

**No. 1.**—7½ in. high; ⅝ in. wick (P. P. 1½ lbs.) .....\$1.00



Oaks Lamp

**No. 2.**—8 in. high; 1 in. wick (P. P. 2 lbs.) .....\$1.50

**No. 3.**—9 in. high; 1½ in. wick (P. P. 3 lbs.) ..... 1.75

**CYPHER'S INCUBATOR LAMPS,** (seamless bottom) with burner and wick complete. No. 0, 85c; No. 1, 95c; Nos. 2 or 3, \$1.10, postpaid. Burners only, No. 0, 40c; No. 1, 50c; Nos. 2 or 3, 70c, postpaid.

## X-RAY EGG TESTER

Used to test fertility of eggs during first week of incubation. Use on an ordinary lamp (No. 2 burner) in a dark room to illuminate interior of egg.

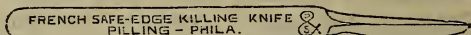
Price, postpaid, 40c



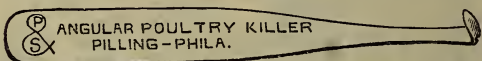
X-Ray.

## POULTRY KILLING KNIVES

You open the fowl's mouth and cut the jugular vein. Hang up by the feet, let them bleed, and pick dry while warm.

FRENCH SAFE-EDGE KILLING KNIFE  
PILLING - PHILA.

Pilling French Poultry Knife. Postpaid 50c

ANGULAR POULTRY KILLER  
PILLING - PHILA.

Angular Killing Knife. Postpaid 50c



**NEW MEDICATED.**—Answers as a nest egg, also an insecticide. Keeps lice out of the nests and off the hen. Non-breakable. Each egg wrapped with paper and full instructions.

Each 10c; 3 for 25c; 12 for 75c; (P. P. 2½ lbs. per doz.)

**LIME NEST EGG.**—Better than China eggs; non-breakable. More natural. Each 5c; 3 for 10c; 12 for 30c (P. P. 2 lbs. per doz.)

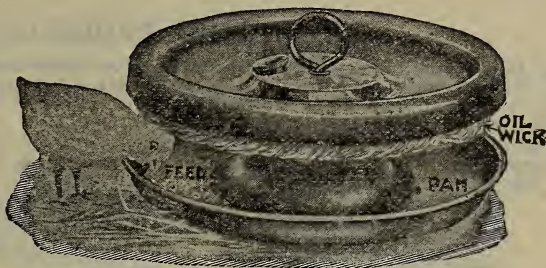




### SANITARY WOODEN PIGEON NESTS

Made of 10-inch, solid square redwood blocks. Sanitary and prevents chilling of eggs or squabs. Cannot tip over. Large enough for any variety of pigeons.

Price, 20c each; \$2.00 doz. (Parcel Post weight, 20 lbs. per doz.)



Automatic Chick Greaser.

### AUTOMATIC CHICK GREASER

(See illustration)—every chick its own doctor. It is the large lice which collect on the heads of young chicks which cause them to droop and die; and formerly the only way was to catch each chick and rub grease on its head; but this slow and tedious process is not necessary since the invention of the Automatic Chick Greaser. The wick around the upper part of the greaser is saturated with Conkey's Head Lice Ointment or with a mixture of two-thirds lard and one-third kerosene (or black oil) and every chick which eats out of the pan will get its head thoroughly greased in a very few minutes. Can be moved from one pen to another.

**NEW STYLE.**—Mailing wgt. 2 lbs., add postage. Price \$1.00

### UP-TO-DATE SHIPPING COOPS

These coops are really "up-to-date" and will give your customers that impression of you if you use them when shipping. Buyers who pay fancy prices for thorough-bred birds like to see them come in a nice coop—not some old cracker box or oil case. These coops are light but strong. The ends have the cleats nailed on. We ship in the flat to save charges, but it's an easy matter to nail them together, for each part is marked.

| Number | Width   | Length | Height | Each | Doz    |
|--------|---------|--------|--------|------|--------|
| NO. 2  | 10½ in. | 18 in. | 24 in. | 40c  | \$4.00 |
| NO. 4  | 10½ in. | 24 in. | 24 in. | 50c  | 5.00   |
| NO. 6  | 19½ in. | 24 in. | 24 in. | 60c  | 6.00   |

For Parcel Post—No. 2 weighs 8 lbs.; No. 4, 9 lbs.; No. 6, 15 lbs.

**Capacity.**—No. 2 suitable for single birds or pair Mediterraneanans. No. 4 for Asiatic male, American or Mediterranean pair or small trio. No. 6 for a pen of five birds, any variety.

### GRINDING MILLS

**NO. 32 HAND GRINDING MILL.**—In this mill are embodied all the good features of other hand grinding mills to which have been added universal burrs or grinding plates that are quickly adjusted and locked for grinding coarse or fine. This machine will grind any kind of grain or seeds, dry bone, shells, crockery, etc., for feeding to poultry. Has a 16-inch fly wheel and is light running; the capacity is not equalled by any other of the same size. Weight 40 lbs.

Price \$5.50

**NO. 33.** 18-inch fly wheel, heavier construction weight 45 lbs.

Price, \$6.50

**NO. 35 B. HAND OR POWER (½ horse power)** Price \$10.00

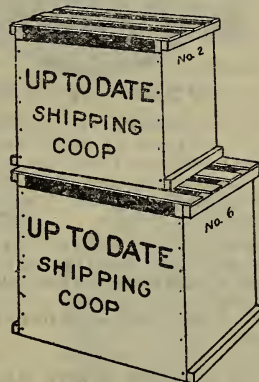
Illustrated booklet on request.

### GREEN BONE CUTTERS

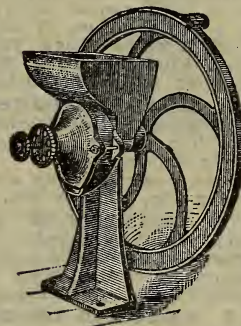
**MANN'S GREEN BONE CUTTER.**—Without any doubt the best and only successful green bone cutter on the market today. The No. 5-B and No. 7-BM are the two best and most popular sellers.

**MANN'S NO. 5-B.**—Has a large balance wheel, making it easy to operate. Should be mounted on a bench. Has four knives, large, solid cylinder, and has the latest patent automatic governing spring feed, which makes it one of the best low-priced bone cutters ever offered. Price \$11.00

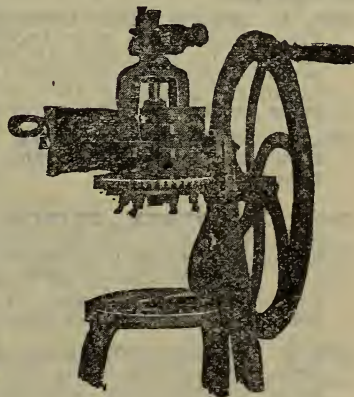
**MANN'S NO. 7-BM.**—The new No. 7-BM is mounted on a strong iron stand, and has patent automatic governing spring feed. Large open-hinged cylinder, giving instant access to all working parts, has six knives, gear guard, anti-clog device, heavy balance wheel and other improvements. (See cut.) Price \$16.50



Shipping Coop.



No. 32 Mill—You need one.



Mann's No. 7 for green bone

Plant berry bushes in the poultry yards. YOU get the FRUIT and the BIRDS get the SHADE in summer. Our nursery catalog on request.

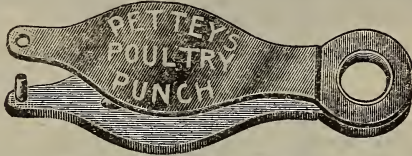


## CAPONIZING TOOLS

Poultrymen can double their profits by caponizing. The operation is very simple; the instructions are so full and explicit that any man, woman or child, after a careful reading, will be able to perform the operation.

**Philadelphia Set** (see cut).—Complete with instructions.

Cardboard box, postpaid, \$2.50; wooden case, velvet lined, \$2.75.



## POULTRY MARKERS

Very necessary for marking the web between the toes of baby chicks, if you wish to know different strains or stocks. Put leg bands on when they get older.

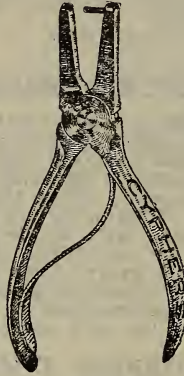
**OTIS & MOE**.—About the same style as Petteys. Price, postpaid, 20c

**Pettey's**.—(See illustration). Postpaid, 20c

**Stearns**.—(See illustration). Postpaid, 35c

**Cypher's Perfect** (See cut).—Large and strong, easy to use. Postpaid, 60c

**Model Improved**.—Similar to Cypher's—cuts clean. Postpaid, 50c



Cypher's



Stearns' Poultry Marker.

## LATEST AND BEST LEG BANDS FOR POULTRY AND PIGEONS

Keep a supply of Leg Bands on hand at all times; this is the only safe way to mark your different birds so you can tell certain stock or strains. Of course every bird must be marked with a band before it can be entered in a show.

**WHAT SIZE?**—When you order, tell us size or what kind of birds you want them for and whether male or female. **DON'T FORGET.**

**NO. 1. LEADER ADJUSTABLE** (see cut).—Has neat, compact and smooth fastening, with no catching points, easily attached and is absolutely secure.

Prices, postpaid, any size, 12 for 15c, 25 for 30c, 50 for 50c, 100 for 80c. (State size.)

**NO. 2. CHALLENGE ADJUSTABLE**.—A new, light weight, smooth, adjustable band, having embossed or raised numbers which makes them easier to read. (One size adjustable for any breed.) Prices same as Leader No. 1

**NO. 3. COLORED LEADER**.—Adjustable. Latest band. The color is inlaid in metal protecting band. Answers every purpose. Colors, white, pink, red, blue, yellow and green. Nos. 1 to 100.

Prices, 12 for 35c, 25 for 70c, 50 for \$1.10 100 for \$2.00.

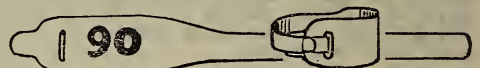
**NO. 4. MOE'S SELF LOCKING LEG BAND**.—You simply push ends together to lock it and it must be destroyed to remove it. Far superior and much cheaper than the leg bands requiring a sealing tool to seal them. Same price as Double Clinch. (State size.)

**No. 8. SEAMLESS PIGEON OR BABY CHICK BANDS**. Prices, postpaid, same as Colored Leader.

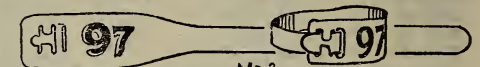
**NO. 5. DOUBLE CLINCH**.—A desirable band, very safe; no exposed corners, ends or loops; has double fasteners (see cut). Also made in Pigeon sizes.

Prices postpaid, any size, 12 for 15c, 25 for 30c, 50 for 50c, 100 for 80c. (State size.)

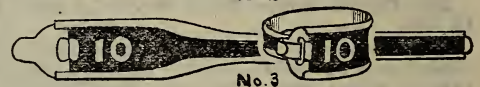
**NO. 6. SPIROL COLORED**.—Durable, Practical, Economical. (See cut.) Provide instant identification without handling the birds. You can identify birds as far as you can distinguish colors, which will tell



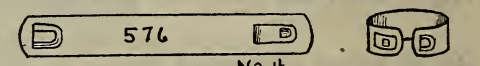
No. 1



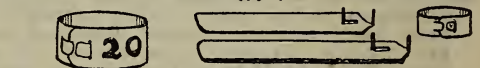
No. 2



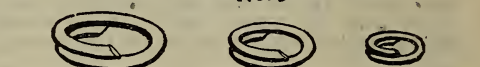
No. 3



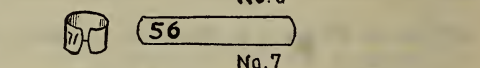
No. 4



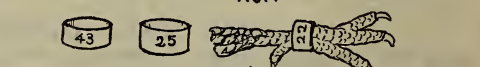
No. 5



No. 6



No. 7



No. 8

you the yearling hens and which are older, your different matings, and so on. Fine for baby chicks. Eight colors: Red, White, Pink, Amber, Blue, Black, Ruby, Green. Slipped on like a key ring; cannot drop off.

Prices 12 for 20c, 25 for 35c, 50 for 50c, 100 for 75c; for all classes except Baby Chick and Pigeon size 15c doz; 65c per 100; Turkeys and Asiatic, 25c doz.; \$1.00 per 100. (State size wanted.)

**NO. 7. OPEN PIGEON OR CHICK BANDS**.—Same price as Double Clinch (see cut).

**DOG, CAT, CANARY, PARROT, POULTRY AND STOCK REMEDIES FOR ALL AILMENTS.** See what we offer in guaranteed products, pages 124-128.



## GOLDFISH GLOBES, FOOD, ETC.

We are the largest retail and wholesale dealers in Fancy Gold Fish in the Northwest, often having a thousand or more on display in our large aquarium at our store.



Chinese Telescope.



Common Gold Fish.



Japanese Fan-tail.

An aquarium is a beautiful ornament. It suits everywhere, parlor, library, dining and sitting room, and may indeed be introduced in apartments of the sick. The bright, active Gold Fish are very interesting, a perpetual source of amusement for both old and young folks. Children are always delighted with them.

**CARE OF GOLD FISH.**—The care of Gold Fish is very simple and little trouble. The water in the aquaria must be changed from one to six times a week, depending on the size of the globe, number of fish and the temperature. When the fish come to surface and gasp for air, they should be given fresh water. **FEEDING.**—The only safe diet is our prepared Fish Food, fed daily and only what they will eat up quickly. Bread or cracker crumbs should never be fed—more fish die from over-feeding than any other cause. Keep the aquariums out of the direct hot sun light and in a cool place.

### PRICE LIST OF FISH

**COMMON GOLD FISH** (see cut).—Very hardy and lively. Each, very small, 15c; small, 25c; medium, 35c; medium large, 50c; large, 3 to 4 inches, 75c; extra large, \$1.00; extra large breeders \$1.50 to \$2.00. Fancy Tri-colored, 35c to \$1.00 and up.

**COMMON SILVER FISH.**—Same as above, except they are silvery white. Each, medium, 25c; large, 50c; large breeders, \$1.00.

**JAPANESE FAN-TAIL** (see cut).—The most popular fancy fish. The fins and tail are of a delicate lace-like appearance, very showy and attractive. Price, golden, small, 25c; medium, 35c; large, 50c to \$1.00; Tri-colored, golden-red, pearly-white and black, showing two or all three colors, 50c, 75c and \$1.00 each.



Standard Globe.

**COMET.** Very fancy; the most graceful of all. Similar to the Japanese Fan-tail, but the fins and tail are much longer and delicate. The tail is often longer than the fish. Price each, small, 25c; medium, 50c; large, 75c to \$1.00; large fountain size, \$2.50.

**CHINESE TELESCOPE** (see cut). Curious and attractive on account of the large, elongated eyes, having the appearance of a telescope. Flowing double tails. Very rare. Price each, all gold, 50c to 75c; all black, 75c to \$1.00; black and gold, 75c to \$1.50.

**NOTE.**—ALL SHIPMENTS (outside of the city) must go by express. A charge of 15c is made to cover cost of Shipping Bucket, holding from two to six fish. Gold Fish can be shipped safely overland hundreds of miles. (Not mailable.)

**TADPOLES.** Desirable as scavengers for the aquaria. They consume the decaying matter and help keep the water pure. Price each, 15c.

**LIZARDS** (Water Dogs), Eastern. About 3½ inches long. Each, 25c

**BOOK—AQUARIA AND GOLD FISH.** Gives full information on care, breeding and feeding; illustrated. 25c

### AQUARIA PLANT OR FISH MOSS

This water plant improves the appearance of the aquaria or globe and helps purify the water, also keeps the water fresh longer. Price per bunch, 25c, postpaid. Cannot supply in July or August.

### FISH FOOD

Cannot be sent by mail. Best imported wafer, large box, enough food for four fish for six months, 35c postpaid. Directions for feeding and care on each box.

### FISH GLOBES

Without foot or base, each quart, 35c; ½-gal. 50c; ¾-gal. 75c; 1-gal. \$1.00; 1½-gal. \$1.25; 2-gal. \$1.50; 2½-gal. \$2.00; 3-gal. \$2.75. WITH BRASS CHAIN FOR HANGING, 50c extra.

### STANDARD GLOBES

Cannot be sent by mail. Like illustration, each, ½-gal. \$1.00; ¾-gal. \$1.25; 1-gal. \$1.50; 1½-gal. \$1.75; 2-gal. \$2.00; 2½-gal. \$2.50; 3-gal. \$3.00.

### AQUARIA CASTLES

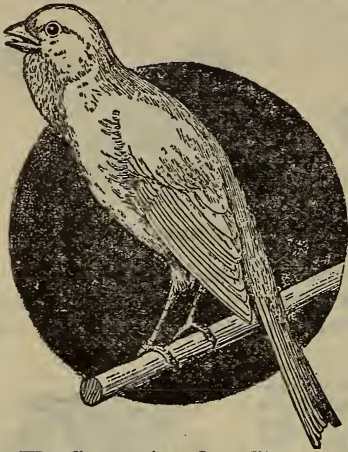
As ornaments to set in the globes. Prices, 25c to 50c and up to \$1.00 each. No. 4, 75c; No. 6, 35c; No. 8, 60c; postage 5c extra. See illustrated Bird Catalog.

**WHEN?** We have the largest supply of Gold Fish on hand during the FALL, WINTER and EARLY SPRING. It is not safe to ship fish during the hot summer months.



## SONG AND CAGE BIRDS

We are the largest importers and dealers in Birds and Gold Fish in the Northwest. This department of our business has grown rapidly and we now carry large and complete stocks of cages, supplies and foods and all birds in their season. Special catalog on request.



We Guarantee Our Singers.

### Canary Birds

**Note.**—Do not compare our prices with the irresponsible bird fakers, who sell for little prices and supply inferior stock and females for males, etc.

**AMERICAN BRED CANARIES.** Healthy, hardy, well-shaped birds, fine singers; all colors. **MALES**, \$2.50 to \$3.50 each. **FEMALES**, \$1.00; selected deep yellow, \$2.00.

**HARTZ MOUNTAIN ROLLERS.** Beautiful, shapely birds. Lovely, free singers, hardy and thrive anywhere. Their cheery song is like sunshine to the soul; their bright plumage, active ways and cheerful dispositions make them the favorites and most popular. **MALES**, \$3.50 to \$5.00 each; extra selected singers, \$7.50. **FEMALES**, \$1.00 to \$1.50 each; selected, \$2.00.

**ST. ANDREASBERG.** These are world-renowned and the sweetest singers. No imported stock to be had now on account of the war, but we offer home raised birds from imported parents that will please you. **MALES**, \$7.50 to \$10.00 each. **FEMALE**, \$2.00 to \$3.00.

Wolf Point, Mont., May 14, 1916.

Dear Sirs: Canary Bird arrived O. K. and we are very much pleased with the Bird. He is a lovely singer.

Yours truly,  
MRS. KNORR.

Fruitland, Ida., April 11, 1916.  
Dear Sirs: The Canary came through O. K. Thanks for prompt attention.

Yours truly,  
MISS ALMA E. CROWTHER.

### White Java Rice Birds

One of the handsomest of all aviary birds. A little larger in size than the average canary. Color pure white and of such solid, smooth appearance that it looks like a piece of statuary. Beak tinged with dark red toward the base. Attracts more attention in our store than any other bird. **Each**, \$5.00; **pair**, \$8.50.

### Paroquets

**YELLOW SHELL PAROQUETS.** Very rare, plumage a beautiful opal yellow, lovable pets. **Each**, \$5.00; **pair**, \$8.50.

**AUSTRALIAN SHELL PAROQUETS.** Often called Lovebirds, look like a miniature parrot, a little larger than a canary, plumage green, very intelligent and beautiful. **Each**, \$5.00; **pair**, \$7.50.

### Other Favorite Cage Birds

We do not always have all of the following birds on hand, but can get them quickly on orders. For further information, write.

|                          | Each   | Pair   |                               | Each | Pair |
|--------------------------|--------|--------|-------------------------------|------|------|
| European Linnet .....    | \$4.00 | \$7.50 | Bull Finch .....              | 5.00 |      |
| Japanese Robins .....    | 5.00   | 8.50   | Society and Strawberry Finch. | 3.00 | 5.00 |
| European Gold Finch..... | 4.00   | 7.50   | Noupareil .....               | 5.00 |      |
| Chestnut Finch .....     | 2.00   | 3.50   |                               |      |      |

### Parrots

We handle more young parrots than all other Northwestern dealers combined. The young parrots arrive during July and August, but we aim to have stock on hand at all times. Price of trained talkers on request. We offer hand raised, not the wild, trapped, unmanageable birds.

**PANAMA PARROT.**—The most popular parrot with our trade. Of quite large size, gentle disposition, easily taught and become great favorites. Deep green plumage. They often show a yellow spot on the back of the head.

**Each**, \$15.00 to \$25.00

**MEXICAN DOUBLE YELLOW-HEADED.**—Large size, gentle, learn quickly and make great pets, green plumage, yellow on top and back of head, red-tipped wings and blue feathers, in the wing and tail.

**Each**, \$15.00 to \$20.00

**CUBAN PARROT.**—Medium size, green plumage, red tips on wings, light face, gentle, fine pets, good talkers. **Each** \$7.50

**MEXICAN RED-HEADED PARROTS.**—Medium size, trim and active, make fair talkers, gentle. Green plumage, bright red on head, blue in wing and tail. **Each**, \$7.50 to \$10.00



Edwall, Wash., Jan. 25, 1916.  
Gentlemen: I received my Fish all O. K. and they are all just fine, so I am sending for some more. I made a present of a few to some sick people, as they enjoy looking at them so much.

Yours truly,  
MRS. M. GUHLKE.

Our Large Illustrated and Descriptive Catalog of Bird and Pet Cages, Supplies, etc., free on request. New and up-to-date canary cages at very reasonable prices.



## BIRD SEEDS, FOODS AND REMEDIES

We are making a specialty of bird foods and seeds and our rapidly increasing trade shows that the public appreciates the opportunity to get "High Quality" foods and remedies of "Merit" for their pets. **NOTE.**—Add postage to all prices, not prepaid, if wanted by mail.

### ROUTLEDGE SEED & FLORAL CO.'S.

**M. Q. IMPORTED BIRD SEED.**—Our own special mixture for imported Hartz Mountain and St. Andreasberg Canaries. Contains no hemp, but the correct amounts of Imported Canary, Sweet Rape, Millet, Maw, etc. Sold only in sealed 1-lb. cartons (see illustration of our 1-lb. carton). Take no other. Price 20c lb. Add postage if wanted by mail.

Fine Mixed Bird Seed. 15c lb.  
H. Q. Hemp Seed (feed sparingly). 10c lb.  
H. Q. Imported Sweet German Rape. 20c lb.  
Easily detected by the sweet taste.

Turkish Maw Seed.—Canaries are very fond of it. Should be fed sparingly. 50c lb.

Lettuce Seed, for birds. 25c lb.

Bird Sand, silver washed. 2½-lb. cartons, 10c

Crystal Grit, very fine. 5c lb.; 4 for 25c

Cuttle Bone, high grade, large size.

Each 5c; postpaid, 10c; with patent fasteners, 15c.

H. Q. Mixed Parrot Seeds. 15c lb.; 2 for 25c

Mixed Parrot Seeds. 15c lb.; 2 for 25c

H. Q. Sunflower Seeds. 15c lb.; 2 for 25c

Parrot Corn, yellow and black, extra quality. 15c lb.; 2 for 25c

**BIRD MANNA.**—Food and medicine combined. A good conditioner. Comes in round cakes. Fastens on the wires.

Per cake, postpaid, 15c



### MAX GEISLER'S BIRD FOODS AND TONICS

Highly recommended by all who have used them. Full directions for use with each package.

**M. G. Imported "Roller" Seed for Canaries.**

Pkg. 20c, postpaid 30c.

**M. G. Finch Bird Seed for Finches.** Lb. 25c; postpaid 30c.

**Treatment A.—(Song Restorer.)** For birds which have lost their voices from cold, etc.; 25c; postpaid 30c.

**Treatment B.—(Digestive Trouble.)** For loss of appetite and bowel disorder; 25c; postpaid 30c.

**Treatment C.—(Cold Cure.)** For birds which are breathing hard, coughing, etc.; 25c; postpaid 30c.

**Treatment D.—(General Tonic.)** For birds which are puffed up and sick; 25c; postpaid 30c.

**M. G. German Bird Biscuit.** Keeps birds in health and song. Per carton 10c; postpaid 15c.

**M. G. "Health Food" for Canaries, Redbirds, Mockingbirds and all other seed-eating and soft-billed cage birds.** Per carton 15c; postpaid 20c.

**M. G. Song and Moulting Food.**—Excellent for birds when shedding feathers and off song. 15c, postpaid, 20c.

**M. G. Prepared Mockingbird Food.** Per tin 30c; postpaid 40c.

**M. G. Medicated Bird Biscuit.**—Food and medicine. Excellent for weak and sick birds. Per carton 20c, postpaid, 25c.

**M. G. Vegetable Extract,** for blood tonic and producer. Per vial 25c; postpaid 30c.

**M. G. Fluid Mite Exterminator.** Per vial 10c; postpaid 15c.

**M. G. Mite Powder** (non-poisonous). Pkt. 10c; postpaid 15c.

### FOR PARROTS.

**M. G. Mixed Parrot Seed.** Properly mixed for good health and plumage. Full and valuable directions on the care of Parrots on each box. Per carton 20c; postpaid 25c.

**M. G. Prepared Corn, for Parrots,** to be given in addition to the seed. Per carton 20c; postpaid 25c.

**M. G. Parrot Biscuit,** for old and young, to keep them in good health and plumage. Per carton 25c; postpaid 35c.

**M. G. Parrot Spray.** Will cure Parrots of the habit of biting off their feathers. Per bottle 50c, postpaid, 65c.

**M. G. Parrot Tonic.** Unexcelled for young Parrots, cures catarrh, etc. Per bottle 25c; postpaid 35c.

**M. G. "Health Food" for Parrots,** for health and fine feathers. Per carton 25c; postpaid 35c.

### PHILADELPHIA BIRD CO.'S REMEDIES, FOODS, ETC.

Full directions and information with each remedy. Descriptive booklet on request.

Bird Bitters. 25c; postpaid 30c

Bird Orange Color Food. 25c; postpaid 30c

German Song Restorer. 15c; postpaid 20c

American Salve. 25c; postpaid, 30c

Moulting Pepper. 25c; postpaid 30c

Mite Exterminator, powder. 25c; postpaid 30c

Nestling Food. 25c, postpaid, 30c

Nesting Hair. Pkg., 5c; postpaid 10c

Parrot Plumage Restorer. 25c; postpaid 35c

Parrot Tablets (for feather pulling). 25c

Red Bird Gravel. Pint, 10c; postpaid 20c



## Spratts Dog and Cat Foods and Remedies

Known and used the world over—none better. Descriptive pamphlets free.



**Spratt's Cat Food.**—A complete food for cats. Used at the leading catteries throughout the world and daily becoming more popular among the fancy. Small pkg. (P.P. 1 lb.), 15c; large pkg., (P.P. 2 3/4 lbs.), price 30c (add postage). Note—the above prepared with Pasteurized Milk, excellent for kittens and invalid cats, or prepared with Fish to be used as a change of diet, especially during the summer months. Prices, same as regular Cat Food above.

**Vermifuge Capsules for Cats.** Postpaid 50c.  
**Distemper Tablets for Cats.** Postpaid 75c.  
**Tonic and Condition Tablets for cats.** Postpaid 50c.

**CATNIP MICE.**—Made of heavy cloth (mouse shape) and filled with catnip. Cats love to play with them. These have taken the place of catnip eggs.

Each, 15c; 2 for 25c postpaid

**SPRATT'S DOG CAKES.**—A properly balanced meat, grain meal and vegetable compound that will not spoil with age. Known and recommended the world over as a complete and constant food for dogs. Most owners of dogs rely on scraps from the table as "dog feed." This is all right as far as it goes, but to be on the safe side and for vacation trips, etc., always keep a supply of Dog Cakes on hand. 3-lb. carton, 30c (add postage); 25-lb. sack, \$2.40; 50-lb. sack, \$4.35; 100-lb. sack, \$8.00.

**Cod-Liver Oil Cakes** are invaluable for old or delicate dogs or those recovering from sickness. Dogs eat them without coaxing.

2 1/2 lb. carton, 30c (postage extra)

### Puppy Foods

**Spratt's Puppy Cakes.**—A perfect and whole food for puppies of all breeds. Puppies should be started on these biscuits when about one month old and they should be continued until such time as their teeth become sound and strong, usually when they are about six months old.

3 lb. cartons, 30c; postage extra

**Plain Puppy Meal.**—This meal should be used before, during and after the weaning period to insure large, vigorous and healthy puppies. Also an invaluable food for dogs of any age out of condition. Follow directions on each package.

2 1/2 lb., 25c carton; postage extra

**KITTENS AND PUPS.**—We would like to have our customers who breed cats and dogs list their surplus stocks with us. Give us full particulars and age, sex and copy of pedigree. Also net price to us.

### We Sell Pups

Pure bred stock of most all breeds. Write for prices, telling us what you want.



**Bone Meal for Puppies.**—Specially prepared in a state to most readily supply the constituents needed to assist in building up a strong frame and preventing rickets, large joints, etc.

3-lb. carton, 25c; postage extra

**Midget Biscuits.**—A small biscuit of superior quality, containing a lesser percentage of meat fibrine than the ordinary cake. About 30 to the pound. Excellent for puppies, toy dogs and cats.

2 lb. cartons, 30c; postage extra

**DOG SOAP (White).** Kills lice and fleas, prevents skin diseases and leaves the coat smooth and glossy, contains no tar, nicely perfumed. Per cake, 25c, postpaid, 30c.

**Alternative Cooling Tablets.** For heated blood, etc. Postpaid 50c.

**Digestive Tablets.** For severe cases of indigestion. Postpaid 50c.

**Diarrhoea Tablets.** To relieve Diarrhoea. Postpaid 50c.

**Purgative Tablets.** Perfectly safe and effective. Postpaid 50c.

**Worm Capsules.** An excellent remedy for Round, Maw and Tape Worms. Postpaid 50c.

**Worm Capsules for Puppies.** May be given with perfect safety to puppies from six weeks old to six months. Postpaid 50c.

**Tonic and Condition Tablets.** For toy dogs and puppies. Postpaid 50c.

**Distemper Tablets for toy dogs and puppies.** Postpaid 75c.

**Vermifuge Capsules for toy dogs and puppies.** Postpaid 50c.

**Dip.** Pints, 50c; prepaid, 65c.

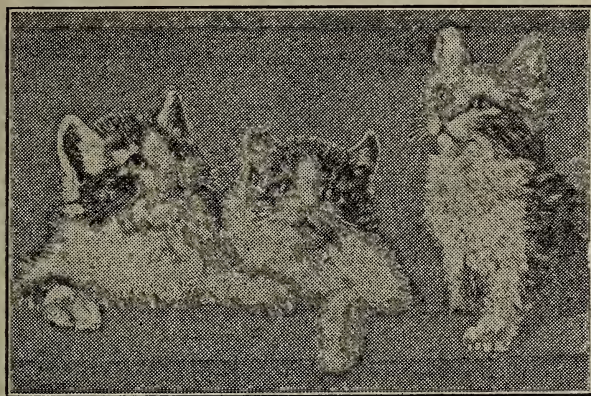
**Mange Remedy.** Pints, 50c; prepaid, 65c.



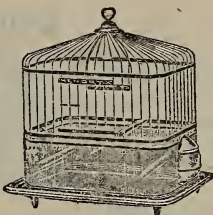
## Bird, Parrot and Chipmunk Cages

We sell all styles and all kinds of cages, also extra supplies such as food and water cups, perches, hangers, springs, swings, nests, bathing dishes, etc., and our prices are very reasonable.

LARGE, NICELY ILLUSTRATED AND DESCRIPTIVE CATALOG GLADLY MAILED ON REQUEST. A POSTAL WILL DO.



"WE SELL  
'EM"



Cage, with guard

## Kittens and Cats

We are in a position to supply upon short notice pure bred, also pedigree Persian and Angora Kittens. If you want a kitten write, stating color, sex and age wanted.

If any of our customers are breeding pure bred stock we would be pleased to list them.

For cat foods and medicine see page 142.

## Rabbits, Belgian Hares, Cavies

These make most desirable pets for the children and educational experts advise that all children are better by having pets. Aside from this, there is quite a demand for these pets and good money in raising them for sale.

**NOTE.**—By Young Stock, we mean from 2 to 3 months old, by Breeding Stock, 6 months or over.



New Zealand  
Belgian Hare

**WHITE ENGLISH (Pink eye).**—In great demand about Easter time, they make ideal Easter rabbits. Young, 50c to 75c each; breeding age, \$1.50 to \$2.50.

**RUFUS RED BELGIANS.**—An improved high bred strain, beautiful rufus red in color, coat fine and soft. Young, \$1.50 to \$2.50 with pedigree, \$5.00 to \$7.50 each. Utility stock, young, 50c to 75c each; breeding age, \$1.50 to \$2.50.

**NEW ZEALAND BELGIANS.**—A hardy, sturdy strain, very popular and much in demand. Grows larger and heavier than above (see cut), being raised more and more for market; lighter in color than above. The meat is fine and white, claimed by many to be better than chicken. Young, \$1.50 to \$2.50; breeding age, \$3.50 to \$5.00; with pedigree, \$5.00 to \$7.50 and up.

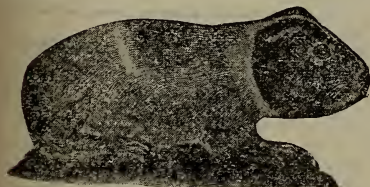
## Cavies—Guinea Pigs

Bright, active and harmless pets. They are in much demand and money can be made raising them. They come in combination colors of brown, white, yellow, black and tan, generally spotted and prettily marked. Solid colors are not always obtainable and higher in prices.

**ENGLISH.**—Smooth, short hair; hardy and healthy. Young, Females \$1.00, Males 50c to 75c; Old, Females \$1.50, Males 50c to \$1.00. A select breeding pair, \$2.50.

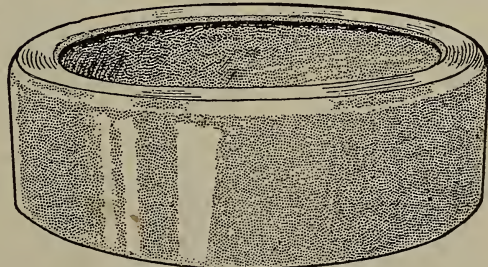
**ANGORA.**—Long, soft hair; 50c more than above.

**ABYSSINIAN.**—Quite rare. Hair is peculiarly twisted or turfed into what might be called rosettes. 50c more than English.



English Cavy (Guinea Pig).

BOOKS  
on  
Rabbits  
Cavies  
See Pg.  
123.



## Ideal Feed and Water Dishes

These, as you will see by the above illustration, have straight sides with an in-curving top or inside rim. These are ideal water and food dishes for Rabbits, Cavies, Cats and Dogs, as they can not tip them over or nose the feed out. Will save their cost in feed in a short time; earthenware, heavily glazed, sanitary and durable.

Prices: 6-inch, 20c each, \$2.00 doz. (P. P. Wgt. 3 lbs. each); 8-inch, 25c each, \$2.50 doz. (P. P. Wgt. 4 lbs. each).



## Conkey's Stock, Dog and Poultry Remedies

**READ THIS.**—We handle 3 to 5 carloads a year of these celebrated remedies which have built their reputation upon the scientific basis of one remedy for each disease.

A "Cure All" is not made by the Conkey Company. Each remedy is intended to serve one special purpose and serve it well. These goods are absolutely guaranteed and we offer them to you on this basis: If they fail to satisfy you in any particular, your money will be refunded to you cheerfully.

**CONKEY'S** valuable Stock Book or Poultry Book Free.

|  |                         |
|--|-------------------------|
| Roup Cure.   | 25c, 50c \$1.00 prepaid |
| Canker Special Remedy.   | 50c or 60c prepaid      |
| Roup Pills, Special,   | 50c prepaid             |
| Bronchitis Remedy,   | 50c prepaid             |
| Blackhead Remedy,  | 50c prepaid             |
| Cholera Remedy,  | 25c and 50c prepaid     |
| Chicken Pox Remedy,  | 30c and 55c prepaid     |
| Gape Remedy,   | 30c and 55c prepaid     |
| Head Lice Ointment,  | 10c and 25c prepaid     |
| Lice Fix, New,   | 50c prepaid             |
| Limber Neck Remedy,  | 50c, or 60c prepaid     |
| Scaly Leg Remedy,  | 30c and 55c prepaid     |
| Rheumatic Remedy,  | 50c, or 60c prepaid     |
| Poultry Laxative,  | 25c, or 30c prepaid     |
| Poultry Conditioner,   | 25c, or 35c prepaid     |
| Poultry Worm Remedy,   | 50c prepaid             |
| Poultry Flea Salve,  | 25c, or 30c prepaid     |
| Sulphur Candles,   | 10c, or 15c prepaid     |
| <b>CONKEY'S WHITE DIARRHOEA REMEDY.</b>  |                         |
| —Save your chicks by putting it in their drinking water. Price 25c and 50c prepaid |                         |

**CONKEY'S LICE POWDER.**—Gets them all. Easy to apply and does the business or your money back. Get a package today. Prices (not prepaid): 8 oz. pkg. 10c; 1½ lb. 25c; 4 lbs. 50c; 8 lbs. \$1.00; 25 lb. pail \$2.50. Note.—Weights given wrapped for mail, add postage.

**CONKEY'S LICE LIQUID.**—A powerful liquid that will destroy the red mites that live in the cracks and crevices in the day and swarm the fowls' bodies at night. Paint or spray the roosts, nests and walls. Prices, 1 qt. 35c; 2 qt. 60c; 1 gal. \$1.00; (not mailable).

**CONKEY'S LAYING TONIC** (Poultry Tonic). —It insures the maximum egg production both summer and winter. Guaranteed to please you or money back. Prices (not prepaid), 2 lbs. 25c; 4 lbs. 50c; 8 lbs. \$1.00. **NOTE.**—Add postage if wanted by mail. Weights given are wrapped.

## REFERENCE TABLES

Quantity of Seeds to produce a given number of plants or to sow an acre.

| QUANTITY PER ACRE                                    | QUANTITY PER ACRE.                                | WEIGHT PER BUSHEL        |
|--|---|--------------------------|
| Asparagus, 1 oz. to 200 plants.....4 lbs.            | Timothy .....15 lbs.                              | Barley ..... 48 lbs.     |
| Barley.....in drills 75 lbs.                         | (Timothy 2-3, Clover 1-3.)                        | Beans ..... 60 lbs.      |
| .....broadcast 100 lbs.                              | Orchard .....30 to 40 lbs.                        | Buckwheat ..... 50 lbs.  |
| Beans, Dwarf, 1 lb. to 75 ft.                        | Rye Grass.....30 to 40 lbs.                       | Blue Grass.14 to 30 lbs. |
| ft. ....60 lbs.                                      | Horse Radish Roots.....                           | Cheat ..... 34 lbs.      |
| Pole, 1 lb. to 100 hills.30 lbs.                     | .....10,000 to 15,000                             | Clover Seed..... 60 lbs. |
| Beet, Garden, 1 oz. to 50 ft.                        | Kale, 1 oz. to 4000 plants..4 oz.                 | Corn, Field, shelled     |
| ft. ....6 lbs.                                       | Kale, Cow Kale drills....4 lbs.                   | ..... 56 lbs.            |
| Mangel, 1 oz. to 75 ft...5 lbs.                      | Kaffir Corn, drills.....8 lbs.                    | Corn, Sweet .....50 lbs. |
| Broccoli, 1 oz. to 3,000 plants.....4 ozs.           | Kohl Rabi, 1 oz to 300 ft..                       | Emmer ..... 40 lbs.      |
| Brussels Sprouts, 1 oz. to 3,000 plants.....4 ozs.   | Leek, 1 oz. to 100 ft....4 lbs.                   | Grass Seed, un-          |
| Buckwheat, drilled, 30 lbs;                          | Lettuce, 1 oz. to 300 ft...3 lbs.                 | less otherwise           |
| broadcast .....50 lbs.                               | Millet—For Seed.....20 lbs.                       | stated ..... 14 lbs.     |
| Cabbage, 1 oz. to 3,000 plants.....4 ozs.            | For Hay .....35 lbs.                              | Hungarian Millet 48 lbs. |
| Carrot, 1 oz. to 100 ft...3 lbs.                     | Melon—Musk, 1 oz. to 50 hills.....2 to 3 lbs.     | Lawn Grass.14 to 30 lbs. |
| Cauliflower, 1 oz. to 3,000 plants.....4 ozs.        | Water, 3 oz. to 100 hills.4 lbs.                  | Meadow Fescue . 24 lbs.  |
| Celery, 1 oz. to 7,500 plants.....4 ozs.             | Oats—For Grain ..... 80 lbs.                      | Millet ..... 50 lbs.     |
| Cheat .....100 lbs.                                  | Hay .....100 lbs.                                 | Oats ..... 32 lbs.       |
| Chicory, 1 oz. to 100 ft...4 lbs.                    | Okra, 1 oz. to 100 ft.... 8 lbs.                  | Onion Sets..... 32 lbs.  |
| Clover, Alsike and White.....8 to 10 lbs.            | Onion Seed, 1 oz. to 150 ft.                      | Peach Pits..... 48 lbs.  |
| White for lawn.....60 lbs.                           | .....3 to 4 lbs.                                  | Peas, smooth.... 60 lbs. |
| Alfalfa .....20 to 25 lbs.                           | For Sets .....50 to 60 lbs.                       | Wrinkled ..... 56 lbs.   |
| Crimson Trefoil .10 to 15 lbs.                       | Onion Sets, 1 lb. to 40 ft.250 lbs.               | Potatoes ..... 60 lbs.   |
| Red .....10 to 12 lbs.                               | Parsnips, 1 oz. to 200 ft..5 lbs.                 | Rye ..... 56 lbs.        |
| Corn, Pop ..... 8 to 10 lbs.                         | Parsley, 1 oz. to 150 ft...3 lbs.                 | Rye Grass ..... 24 lbs.  |
| Sweet or Field, 1 lb. to 150 hills.....15 to 20 lbs. | Peas—Garden, 1 lb. to 75 ft. ....80 to 100 lbs.   | Red Top ..... 14 lbs.    |
| Silage, drilled....40 to 60 lbs.                     | Field .....100 lbs.                               | Solid Seed.30 to 42 lbs. |
| Corn Salad, 3 ozs. to 100 ft.5 lbs.                  | Pepper, 1 oz. 1000 to 1500 plants                 | Speltz ..... 40 lbs.     |
| Cress, 1 oz. to 400 ft....1 lb.                      | Potatoes, cut .....600 lbs.                       | Timothy ..... 45 lbs.    |
| Cucumber, 1 oz. to 50 hills.....2 lbs.               | Pumpkin, 1 oz. to 25 hills..3 lbs.                | Vetches ..... 60 lbs.    |
| Egg Plant, 1 oz. to 3,000 to 4,000 plants.....4 ozs. | Radish, 1 oz. to 100 ft....                       | Wheat ..... 60 lbs.      |
| Emmer or Speltz .....60 lbs.                         | .....8 to 10 lbs.                                 |                          |
| Endive, 1 oz. to 300 ft....4 lbs.                    | Rape, drilled 3 lbs., broad-                      |                          |
| Flax, for seed.....40 lbs.                           | cast .....5 lbs.                                  |                          |
| Grass:   | Rye—For Grain .....60 to 80 lbs.                  |                          |
| Kentucky Blue—                                       | For Hay .....100 to 150 lbs.                      |                          |
| for pasture ....30 to 40 lbs.                        | Salsify, 1 oz. to 50 ft....8 lbs.                 |                          |
| for lawn .....100 lbs.                               | Speltz .....60 lbs.                               |                          |
| Mixed Lawn .....100 lbs.                             | Spinach, 1 oz. to 100 ft..10 lbs.                 |                          |
| Red Top Common.....30 lbs.                           | Sugar Cane, drilled.....10 lbs.                   |                          |
| Solid Seed .....15 lbs.                              | Sunflower .....5 lbs.                             |                          |
|  | Squash, Summer, 1 oz. to 25 hills.....3 to 4 lbs. |                          |
|  | Tomato, 1 oz. to 2500 plants.4 oz.                |                          |
|  | Tobacco, 1 oz. to 4,000 plants                    |                          |
|  | Turnip, 1 oz. to 300 ft....2 lbs.                 |                          |
|  | Vetches .....85 lbs.                              |                          |
|  | (Or 60 lbs. with 40 lbs. of grain.)               |                          |
|  | Wheat .....80 to 100 lbs.                         |                          |

### TREES OR PLANTS.

For complete tables giving distance apart and number of trees, berries or plants required to plant an acre see our Nuresery Catalog.



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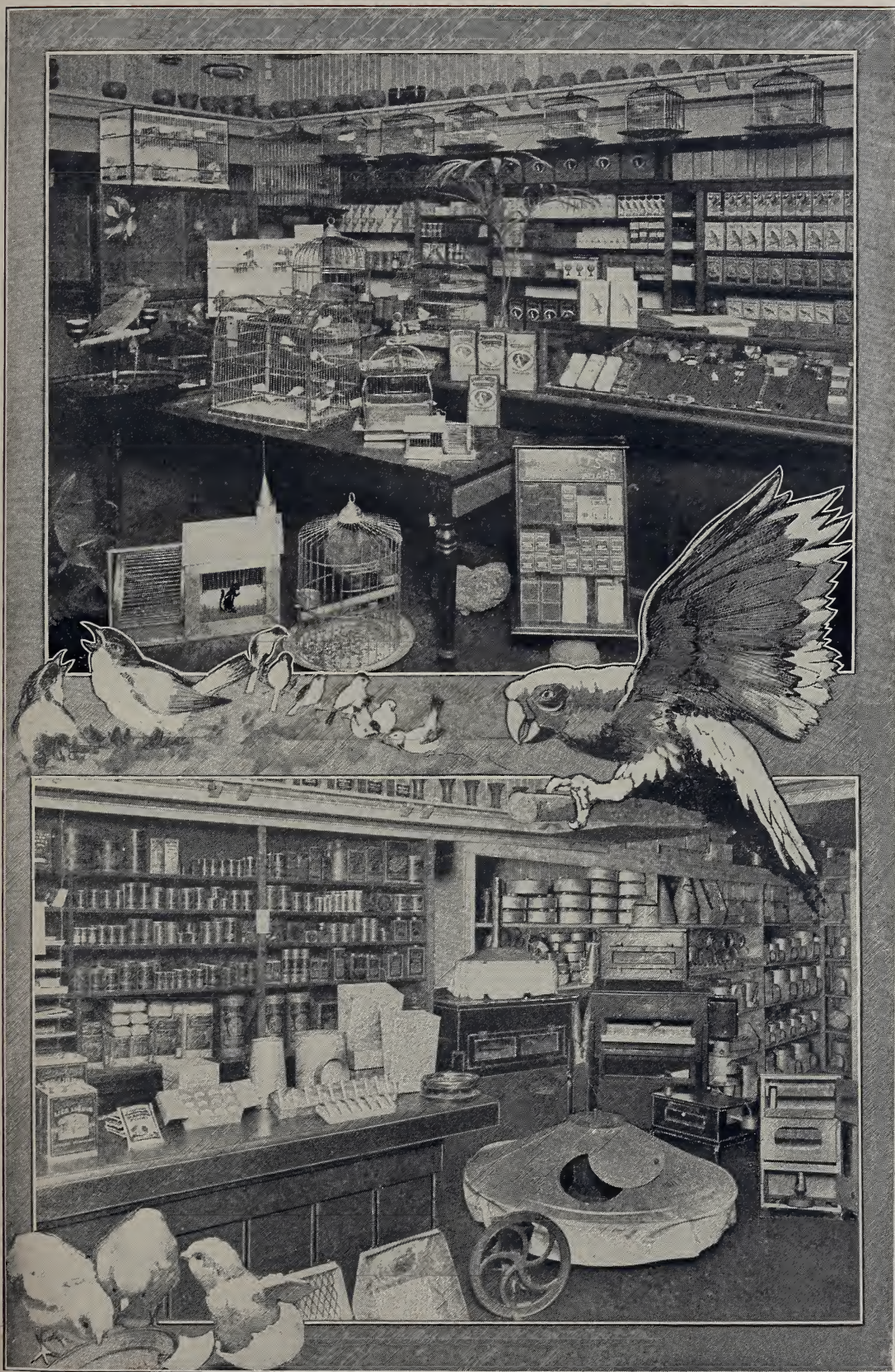
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